KINGDOM OF MOROCCO

ROYAL CABINET

THREE YEAR PLAN

1965 - 1967

ECONOMIC CO-ORDINATION
AND PLANNING DIVISION

KINGDOM OF MOROCCO

ROYAL CABINET

THREE YEAR PLAN

1965-1967

ECONOMIC CO-ORDINATION
AND PLANNING DIVISION

471
cop. 3

Law N° 2-65 of 28th. Muharram 1385 (29th. May 1965) approving the Three Year Plan for 1965-1966-1967

PRAISE BE TO GOD ALONE !

We, Commander of the Faithful, King of Morocco
(Seal of His Majesty Hassan II)

In consideration of the Constitution, and in particular articles 66, 98 and 99,

In consideration of the Plan drawn up by the Supreme Council for National Improvement and Planning as adopted by the Council of Ministers at a meeting held on 15th. January 1965,

And in consideration of the fact that this has been adopted by both Houses of Parliament,

Do hereby promulgate the following Law :

ONE AND ONLY ARTICLE, *that is to say : The Three Year Plan for 1965-1966-1967, as laid down in the document attached to the original of this Law, is hereby approved.*

Given at Rabat on this twenty-eighth day of
the month of Muharram 1385 (29th. May 1965)

ADDRESS

DELIVERED BY HIS MAJESTY KING HASSAN II AT THE OPENING SESSION OF THE SUPREME COUNCIL FOR NATIONAL IMPROVEMENT AND PLANNING ON 21 st. DECEMBER 1964

Gentlemen,

We are happy to-day to see the Supreme Council for National Improvement and Planning hold its first meeting, at which the Council will perform the important duties assigned to it by the Constitution of our country.

It is naturally a great pleasure for Us when one of the institutions on which We have set Our hopes henceforth begins to play its part, together with others, in the national effort ; but it is an even greater pleasure to be present to-day as Chairman of that body in accordance with the Constitution, in order to be in personal contact with you within the framework of this institution, and to share in your labours by setting out the Plan which We Ourselves have laid down. This should help you in your discussions and in working out a pattern for the Plan, as well as the basis on which that pattern rests.

Gentlemen,

The Constitution has assigned to the Planning Council the task of drafting the Plan and establishing the expenditure required to carry it out. You must therefore study the text submitted to you and give it your fullest attention. If, after examining it, you feel that it should be altered, you may amend it in the light of the conclusions you have reached. Nevertheless, the result of your studies cannot be submitted to Parliament for approval until it has been adopted by the Council of Ministers as required by the Constitution.

It will therefore be apparent that the task assigned to the Planning Council is of the greatest importance, since the preparation of a Plan and the establishment of the necessary expenditure is far from easy and is in fact a labour requiring all your foresight and breadth of outlook, as well as an ability to weigh the consequences of your decisions ; for equipment expenditure is submitted for Parliament's approval only once and remains effective for the whole of the Plan period.

Moreover, this means that the result of your labours, after recommendation by the Council of Ministers and the approval of Parliament, will inevitably fix the expenditure on equipment for the budget over the next three years. This will obviously affect our economic life.

Gentlemen,

The Planning Council will have to discuss some delicate problems. The economic situation is hardly as satisfactory as we would wish. During the last few years local production has only shown an annual progress of 1.6 %, whereas the population is now growing at the rate of 3 %. The gap between production and the birthrate means that we are living through an awkward period and that our living standards are threatened. Moreover, some items of State expenditure have risen since independence and have diminished our resources, which are not enough to balance our spending. Apart from this our reserves of foreign exchange have dropped over the last fews years and our means of payment have been reduced to such an extent that we have to face this situation with all the gravity and resolution which it demands.

The scarcity of the means at our disposal has forced us to impose a strict limit on the areas to be given priority under the Plan. Our keen desire to succeed and to carry the Plan through has obliged Us to select the areas where our efforts can give the best results by creating a prosperity which will reach all provinces of the Kingdom without exception. The stages and the areas I mentioned With regard to priority are : Agriculture, Tourism and Training.

Gentlemen,

The growth of agricultural production is an absolute necessity. This increase in production will feed our citizens. You are aware of the fact that climatic conditions in our country are subject to frequent changes, so that the smallest alteration of this kind brings with it a fall in food production which can only be made up by extremely costly imports from abroad owing to the fact that 70 % of our fellow-citizens make a living from agriculture.

Our desire to promote prosperity has led to a review of the organisations closely affecting the Ministry of Agriculture. We have given instructions in this sense for the latter Ministry to be organised on more efficient lines and We hope that this transformation will change agricultural conditions in order to improve the lot of our farmers and their families and to provide our society with a harvest able to cover consumption and allow for export.

You are well aware of the importance We attach to the National Improvement scheme (" Promotion Nationale ") and the hopes we have placed in it. This special attention is based not merely on the fact that this institution is a means of technical action but also on the need to make this scheme a dominant idea carrying complete conviction for each citizen, enabling him to provide a useful effort by acting honestly for the public good while at the same time benefiting from his own labour.

We firmly trust that by agricultural development and the National Improvement scheme we shall be able to provide employment, raise the income level in rural districts and increase the purchasing power of farmers so that the local market may expand and help towards the industrialisation of the country.

Our choice of Tourism as a priority area is determined by the fact that our country has natural advantages to attract tourists seeking repose and tranquillity in picturesque surroundings and anxious to widen their knowledge. It is obvious that we must take advantage of this situation by means of a system providing our visitors with everything they require. If we can create this system and if we are able to encourage people to visit our country, we can allow the nation as a whole to benefit from tourism, which has become a universal phenomenon and an important asset in foreign currency for tourist countries, not to mention the beneficial results of the tourist movement, which will enable our people to get to know others, to make themselves known in return and to draw closer to the outside world.

The third priority area is the problem of Training. We have frequently emphasised the importance of professional training, and the need to strengthen it, since We are convinced that it is an absolute necessity for our country to be able to draw on a body of personnel trained in various specialised fields, in particular on those with a though technical knowledge.

Being convinced of the need to promote the prosperity of our country and its development through the labour of its sons, We are absolutely determined that the planning project you are to study and thoroughly examine should emphasise the special effort We have decided to make in this field.

Gentlemen,

The fact that We have opted for a growth in agricultural production, the training scheme and the priority to be given to these aims, by no means indicates that the State has neglected the other tasks it has assumed. As regards industrialisation, the State is at all times prepared to meet its obligations directly or indirectly, or in genuine co-operation with those who wish to collaborate with the State to this end. We should point out that the field is wide open to the private sector. We have no intention of depriving this sector of the necessary means of action. Private enterprise has only to be in a healthy condition, and to conform to Our aspirations by considering the national interest, in order to receive the encouragement and the good wishes of the State.

As for the primary substructure which is the foundation of our economy, that is to say roads, harbours, communications and power, the State will continue to work for the completion of this substructure while bearing in mind those projects which are of real use and assured profitability. The State will also continue to strive in order to provide education for the greatest possible number of pupils.

This education is intended to teach Moroccan children what they should know in the way of religious and civic subjects and familiarise young people with the world we live in to-day.

Planning is not an aim in itself but a means of achieving a definite object involving, among other things, increased development and a strong and stable currency. This object can only be attained by unanimity of ideas and opinions regarding a planning system marked by our own personality and by the co-operation of men of good will throughout the country for the realisation of that real progress to which We aspire and which will flourish in all economic and social fields in every part of the Kingdom.

Whatever the projects drawn up by the Government and whatever the means at the latter's disposal for carrying them out, the prosperity and development we desire cannot bear fruit unless all classes among our people, and especially national organisations, are convinced of the utility of these projects and of the effect they will have ; unless they show their enthusiasm in achievement and execution ; unless they apply all their faith and their perseverance to the task. That is why We are making this fervent appeal to the Nation to consider the Three Year Plan (after discussion and approval by both Houses of Parliament) as the aim and object of its own hopes. I ask the Nation to give its enthusiastic support to this Plan which is to bring our country prosperity and well-being.

We also appeal to the Nation to reinforce the Plan by individual initiative, by positive action and constructive projects in the economic and social field, with the certainty that the Government and its institutions will provide the necessary encouragement and support.

It is clear that the mutual support of people and gouvernment and their ability to march together towards the same end will alone make it possible to remove obstacles and attain our objective.

May Almighty God guide you in the right path as this time when you are drawing up the Plan in its final form. May He crown all our actions with success so that we may achieve the reform and the well-being of the Nation.

⁂

e House of Parliament, as the site and object of its own hopes, k the Almighty [illegible] its work [illegible] richly and fruitfully [illegible] which to bring our country prosperity and well-being.

We also appeal to the Nation to reinforce its rise by mobil- al initiatives, by positive action and constructive projects in the eco- nic and social fields with the certainty that the Government and institutions will provide the necessary encouragement and pport.

t is clear that the common effort of people and government [illegible] Malta in which they can find themselves [illegible] and will allow ss is possible to remove obstacles and attain our objectives.

May Almighty God guide you in the right path of this [illegible] [illegible] of the Plan A to final form. May He crown their efforts with success so that we may achieve the natural and well-being of the Nation.

ADDRESS

DELIVERED BY HIS MAJESTY KING HASSAN II AT THE CLOSING SESSION OF THE SUPREME COUNCIL FOR NATIONAL IMPROVEMENT AND PLANNING ON 8th. JANUARY 1965

Gentlemen,

When you began your work We were sure that you would seriously and diligently examine the draft of the Three Year Plan in order to lay down its aims and the means of carrying it out.

It is a pleasure for Us to be able to point out that this diligence has not affected the validity of the studies undertaken and the suggestions put forward.

Within the working committees each of you has been able to give free and complete expression to his opinions and formulate amendments.

This considered effort has shown itself in the value of the intervention which is summarised in the sectional reports and the general report of you all.

We are glad to give homage to the high degree of conscientiousness you have shown and to congratulate you on having carried through this remarkable effort, your only concern being the legitimate interests of the Nation and the profound aspirations of our people.

In fact a plan is not an inert piece of administrative paper ; it reflects a collective development, it represents a combination of the material, technical, financial and above all human means by which, after defining our aims, each one of us undertakes to strive for their achievement.

It is in this spirit that the Government will, at a Cabinet meeting. give its pronouncement on your conclusions with a view to adopting the project which will be forthwith submitted for the approval of Parliament.

The constructive work which has been carried out has justified the priorities agreed on for the Plan, viz. :

- — Agricultural development ;
- — Development of Tourism ;
- — Training.

Your special commission has well understood this point, since it emphasises in its report that it considers the preliminary draft of the Three Year Plan "an economic code of good behaviour" for investment which is entirely acceptable, and that it agrees with the priority postulated for the development of agriculture, tourism and Training.

This impels Us to insist once more on the need for a series of choices, which necessarily implies a planning policy. Faced with what is essential and desirable, we are obliged to retain that which is both essential and feasible.

AGRICULTURAL DEVELOPMENT

The priorities accepted presuppose for their realisation a concentration of existing or foreseeable means.

Your special committee on agriculture particularly insisted on an overhaul of public organisations concerned with agriculture, on the reinforcement of the means and action connected with agricultural credit, on the working of recovered land and the rational utilisation of water.

These problems are always with us.

The land is a difficult problem and at the same time it is the source of our survival and our development.

Every inadequately studied alteration is liable to prove more harmful than well prepared evolution.

Our main concern will be the creation of conditions permitting the modernisation of our agriculture in order to improve the productivity and the welfare of the farmers.

TOURIST DEVELOPMENT

The suggestions of the committee on Tourism are in tune with the spirit of the draft Three Year Plan. It is true that the development of Tourism implies a considerable effort in the way of substructure, accommodation and professional training. This effort will only bear fruit if it is exerted in a happy atmosphere in which Morocco, land of traditional hospitality, can, if possible, give even more emphasis to this atmosphere so much sought after and lauded by our visitors.

TRAINING

Your committee on Training and social affairs has understood and approved the need to refrain from action before studying and defining both the present situation with regard to technical and professional education and that of agricultural education.

If your concerted efforts manage to establish a realistic and concrete policy, by defining and evaluating both our requirements and the action needed to satisfy them, this will undoubtedly constitute one of the finest achievements of the Three Year Plan.

The Government will be responsible for giving all its attention to the study of the serious problems which have arisen, such as :

— The birthrate and its consequences ;

— The revaluation of the function of teaching.

Industrialisation is certainly an inevitable and permanent necessity in our economic effort, but this effort presupposes a distribution of tasks. Although it is natural for the State to take complete and direct charge of investment in some fields, the industrial sector should be an example of concerted effort, including the active participation of the private sector on a semi-contractual basis which lays down mutual obligations and advantages.

The suggestions put forward will be closely studied. The importance and volume of the work done justify sound reflection and considered judgment.

We know, and We appreciate, the validity of the Commission's arguments. Requirements are considerable and techniques are multiplying from day to day. It would have been desirable to accept the suggestions submitted and even widen the scope of their application.

The Government will do its best to raise the ceiling of financial restrictions.

It would be unwise and unreasonable to plan to-day with the certainty that we cannot act to-morrow.

It is with deep satisfaction that We declare this fruitful working session closed, the result of effective co-operation with the public authorities.

The severe nature of your discussions justifies your confidence in the validity of your judgment.

The man of action, concerned for the economic and social future of our country, should not indulge in empty and sterile criticism but make a realistic effort to build a road for our development.

The proof of your fine moral and intellectual qualities which you have given Us constitutes a guarantee for our future.

There is no doubt whatever that over the next three years you will show the same spirit and the same determination.

⁂

[illegible] and
economic policy, by defining and a [illegible] will undoubtedly contrib- and the action needed to satisfy it [illegible] but one of the latest achievements of the [illegible].

The Government will be responsible for giving all its attention to the study of the various problems which have arisen, such as :

— The [illegible] and its consequences ;

— the understanding of the function of teaching.

Industrialisation is [illegible] on [illegible] and permanent [illegible] is not [illegible] effort, but the [illegible] presupposes a distribution of tasks. Although it is normal for the State to [illegible] direct charge of investment in some [illegible], the industrial sector should be an [illegible] the active participation of the private sector [illegible] down mutual obligations and advantages.

The suggestions put forward will be closely studied. The importance and volume of the work done justify serious reflection and considered judgment.

We know, and We appreciate, the validity of the Commission's arguments. Requirements are considerable and techniques are multiplying from day to day. It would have been desirable to accept the suggestions submitted and even widen the scope of their application.

The Government will do its best to [illegible] the ceiling of financial restrictions.

It would be unwise and unreasonable to plan today with the certainty that we cannot cut tomorrow.

It is with deep satisfaction that We declare this fruitful working session closed, the result of effective co-operation with the public authorities.

The diverse nature of your discussions justifies your confidence in the validity of your judgment.

The men of action, concerned for the economic and social future of their country, should not indulge in empty and sterile criticism but make a resolute effort to build a road for our development.

The proof of your fine moral and intellectual qualities which you have given Us constitutes a guarantee for our future.

There is no doubt whatever that over the next three years you will show the same spirit and the same determination.

INTRODUCTION

GENERAL PATTERN

Aims and forecasts for economic and social development must be contained in a general plan adopted by the State which lays down the direction to be taken by such development over a member of years. Thus both public and private enterprise can be mobilised.

This is the object of the document dealing with the period 1965-1967. It is more of a programme than a Plan, since it deals essentially with the equipment which the State intends to set up during those three years. Nevertheless it has been established on the lines of the general outlook and thus forms part of the planning activity in which the State is constantly engaged.

This equipment programme has been drawn up by the Planning Council and will then be submitted to Parliament for approval in accordance with the Constitution.

During the period in question the Government will follow a policy intended to ensure a better economic and financial balance while at the same time laying the foundations for permanent expansion.

The dangers threatening to unbalance Morocco's economy are due to a member of causes. In the first place the unfavourable balance of payments is covered by a reduction in foreign assets and by indebtedness to foreign countries. Savings devoted to productive investment are also inadequate, with the inevitable effect on the

rate of production. Moreover, the State budget is increasing and weighs heavily on the economy, whereas revenue cannot keep pace with it.

The strained situation, which was even more pronounced in 1964, requires really drastic treatment during 1965-67.

The Government is endeavouring to make a financial recovery in order to deal with the present unbalance. Above all the budget must be balanced and any sacrifices involved spread fairly over the various social groups.

This rigorous policy must be accompanied by measures dealing with the organisation and working of the public sector. Over the last few years, with a view to modernising agriculture and industrialisation, the State has created new institutions and procedures which, after a trial period, must now be consolidated or, in some cases, revised in order to make State intervention more efficient.

Inevitably we can only grope towards economic development in the first stages. In default of adequate surveys it is hard to make a clear cut choice and the various courses of action are not properly perceived. In fact since 1958 progress has been on the whole relatively small and uneven. Now however it is possible to make a better analysis of the basic problems. The experience gained from the Five Year Plan shows that planning must be better adapted to the realities of Moroccan economy if it is to achieve tangible results.

Thus we have embarked on a new phase destined to allow our economy to get under way. With this end in view the Government has decided to embody its intentions in a 1965-67 plan which lays down priorities for the next two years. The object is to concentrate on the most practicable schemes now that our financial situation imposes severe restrictions on government expenditure. This can only be done by mobilising the material and psychological resources of the country.

⁂

I. – The situation at the outset of the Three Year Plan

The situation at the outset of the Three Year Plan is determined by the success and failure of the Five Year Plan. Whatever corrective action may be taken this three year period is too short not to be effected by past or current action.

⁂

A. — THE FIVE YEAR PLAN

The 1960-64 plan recognised three sectors :

- The public sector, which comes under the State budget and, to a lesser extent, local government budgets ;
- The semi-public sector, the importance of which has risen with the creation of new departments such as the National Irrigation Office, which indicates a new line of action, or the Industrial Research and Investment Office, an example of the State's intention of intervening in a new field ;
- The private sector for which the Plan is essentially a guide to individual entreprise indicating the probable trend of the market and giving a list of worthwhile investments. In addition encouragement was given to investors by legislation known as the " Investment Code ".

It is an undoubted fact that, whereas the plans for the public sector have been carried out practically in their entirety, the activity of the private sector has proved inadequate.

The consequences of this unbalance have been serious :

- — The improductive social burden represented by State investment has not been balanced by the necessary increase in production ;
- — Public finances have thus deteriorated and the financing methods used have had a bad effect on the currency ;
- — Reserves have fallen owing to expenditure in foreign currency out of proportion to the growth of resources.

1°) Successes of the Five Year Plan

These were mainly due to the carrying out of the intended investment programme but the result was disappointing owing to the inadequacy of private production.

a) The public sector :

The achievements in this sector may be expressed by the following figures :

SECTOR	Allocation under the 1960-64 plan	Credits granted in 1960-64
— Agriculture	788,2	861,9
— Industry - Hadicrafts - Fisheries	300,8	304,3
— Electric power	51,5	70,1
— Substructure	550,9	665,5
— Town and country development	314,5	323,2
— Tourism	7,7	23,6
— Social expenditure	413,2	300,3
— Administration	120,0	181,4
TOTAL	2.546,9	2.730,4
— Reconstruction of Agadir......	—	200,9
TOTAL	2.546,9	2.931,3

N.B. — The above table calls for further observations.

1. - Credits granted to industry were in fact higher owing to treasury advances which increased special account charges.
2. - Delays in the "social" sector were due to a relatively slow rate of building in view of the magnitude of the task and the scarcity of qualified instructors.

b) Results :

As we have seen, the effort made by the State could only have been borne easily if the production aimed at in the Plan had at the same time been achieved.

Since inadequate results were shown by the private sector, the State had to face an increase in its annual expenditure while resources showed only a slight increase.

One or two examples can be quoted :

1°) Undoubtedly the schools target was reached, especially as regards primary education. For the 1963-64 school year the number of pupils in State schools alone was more than 1,223,000.

The direct results can be shown as follows :

— In 1959 the Ministry of Education employed 25,755 persons; in 1964 the figure was 44,964, not including temporary staff.

— Working credits amounted to 225 million dirhams in 1959 and reached 395 million in 1964.

2°) The Ministry of Health has set on foot an extensive preventive medicine scheme in town and country districts.

Thus :

— The number of employees, totalling 6,776 in 1959, rose to 10,291 in 1964.

— Working credits rose from 100 million dirhams in 1959 to more than 200 million in 1964.

These figures are merely an indication, since it was the total expenditure on equipment in 1960-64 which is the chief explanation of the fact that ordinary government expenditure increased from 1,392 million dirhams in 1959 to 2,191 million in 1964, i.e. a rise of more than 57 %.

For the same period gross internal production, expressed in dirhams, rose from 7,240 million to 10,790 million in 1964 (provisional estimate), which represents an increase of about 49 %. This development, satisfactory on a quantitative basis, in fact tended to disguise the poor results of agriculture in 1961 and the repercussions of the general rise in prices (in 1959 the gross internal production of Morocco was only 8,240 million dirhams, that is to say an increase of less than 14 %).

2°) Deficiencies of the Five Year Plan

The overall aim of the Five Year Plan was to increase annual production by 6.2 %. At the same time savings were to reach 20 % of the gross national product in 1965 as opposed to 13 % in 1960.

a) Savings and investments

Whereas public investment was more or less true to the forecasts, private investment remained practically stationary in relation to the period 1952-60.

Apart from this, the scale of savings was unrealistic for such a short period, since the figure of 20 % proposed for 1965 would have been hard to reach even in countries with a higher standard of living.

According to known results, the following will show a comparison of achievements with forecasts :

Gross investment	1960	1961	1962	1963	Total for 4 years
— Plan forecast ...... for 1960 in millions DH.	918	1.219	1.527	1.837	5.500
— Achievements ...... in DH at current rate	918	1.041	1.070	1.250	4.279
— Achievements ...... in DH at 1960 rate	918	988	987	1.100	3.993

N.B. — As regards 1964 the amount of investment is unlikely to exceed 1400 million DH (current rate). Increased activity on the part of the State accounts for most of the general figure.

b) Government finance

The budget has been rising steadily. It now represents 30 % of national income as opposed to only 20 % in 1960. Since the national income only increases by 4 % p.a, government expenditure has absorbed an ever increasing portion of national assets.

This increase in government spending creates problems for which the solution is more and more difficult. A comparison of resources earmarked for the general budget, subsidiary budgets and special Treasury accounts shows an excess of government spending over resources of about 788 million DH in the financial legislation for 1964.

The increase in working expenditure, i.e 7.6 % between 1963 and 1964, is mainly due to personnel expenses and those incurred by the Public Debt Department or government subsidies. As regards the increase in expenditure on equipment, this represents 18.5 % between 1963 and 1964. In order to meet the excess of actual government spending resources, tfe Government has had to have recourse to the Treasury, especially public debt, and the same time to advances by the Bank of Issue.

In the present state of affairs the financial deficit becomes ever more threatening for the monetary balance. For this reason steps have ben taken with a view to financial recovery involving increased revenue (additional income tax and death duties, abolition of the sugar subsidy and economy on staffing expenses). Further measures are expected.

Strict limitation of government spending raises the question of the relation between working expenses and equipment expenditure for 1965-67. There is no point in contemplating an increase in expenditure on equipment in priority sectors if this bears no proportion to the expenditure which the working budget can stand. It is not sufficient to build schools and hospitals ; staff has to be recruted. It is not enough to prepare land for exploitation ; staff is needed to mobilise the farmers. Thus the financial limits set to the recruitment of new administrative staff mean that a reasonable ceiling must be set as regards gorvernment expenditure on equipment.

The inadequacy of savings over the past few years has meant that more and more foreign aid been required to finance investment. But whatever the amount of this foreign aid the nation itself must make the sacrifices required for its own development.

One the one hand, therefore, consumption must be restricted in favour of investment and, on the other hand, priority must be given to productive as opposed to unproductive investment. Thus steps must be taken, either directly or by exhortation, to cause persons or firms with savings to invest these savings. Development depends on mobilising savings, especially among the small of citizens capable of saving.

The Government contemplates various measures to create extra savings such as a taxation system restricting luxury spending (certain types of building for example), encouragement given to reserve funds in businesses, encouragement of individual savings, restrictions on consumer credit etc.

c) Prices and wages

Prices have risen steadily over the last few years. Taking 100 as a basis for August 1959 the index for wholesale prices (70 items) went from 124.1 in December 1961 to 123 in December 1962, 130.7 in December 1963 and 131.1 in September 1964. As regads the cost of living, calculated on the basis of the cost of these items, this rose from 100 in September 1959 to 117.2 in December 1962, 123.8 in December 1963 and 125.3 in September 1964.

As for wages, although government policy tended to check inflation by avoiding automatic pay increases, it would appear that the private sector has in fact been granting various increases. It is difficult to make an exact calculation but wages have probably kept ahead of living costs for some years.

d) Balance of payments

The deficit which reached 526 million DH in 1961 (a year of exceptional drought) fell to 379 million in 1962 and 308 million in 1963. Although it is difficult to make forecasts here owing to lack of complete statistics, we can estimate that the trade balance will show a minimum yearly deficit of more than 400 million dirhams. This probable deterioration is mainly governed by the food sector. Increased imports of foodstuffs will follow the higher price of sugar (estimated at 35 % in relation to 1963) and the need to import soft wheat.

To this deficit in the trade balance must be added the deficit resulting from current invisible transactions and movement of capital. All in all, without taking into account foreign aid, the balance of payments deficit may amount to 200 million DH for 1964 in addition to the 243 million deficit for 1963. These figures show the need for rapid development of those sectors which earn foreign currency. The 1965-67 plan should tend to eliminate the present balance of payments deficit.

e) The monetary situation

This situation was already disturbing at the end of 1963, mainly due to the extremely unbalanced condition of government finance and the deterioration of external finance. Since then the factors making for unbalance have continued to make themselves felt and thus show us the extent of the recovery programme which has become neccesary.

The increase in cash since the end of 1962 affected fiduciary money more than paper money. In the eighteen months between December 1962 and July 1964 the relation between the two types of money took an unfavourable turn.

The development was in fact characteristic :

Foreign assets, after a rise in 1961 and 1962, showed a definite decline since then, dropping from 939 million DH in December 1962 to 442 million in June 1964. Unless a rapid recovery is achieved

Morocco's economy is likely to be drained of foreign currency reserves.

Treasury debts increased by 50 % between December 1962 and June 1964, when they reached the figure of 1528 million dirhams. Owing to the deficit of 788 million foreseen in the Finance Law of 1964 this level is tending to be exceeded during the next few months, but the different sources of finance previously employed (long-term debts, short-term, medium-term and sight debts, debts to the issuing bank and foreign aid) can now only provide limited resources. For this reason the Government must take the most drastic steps to deal with the unbalance in public finances.

Credits granted to the economy have expanded to a moderate extent but have been more considerable than the expansion of the economy itself, although this increase has been mainly due to our having had recourse to rediscount on the issuing bank. Credits carried by the banks have increased only slightly, which shows their difficulty in meeting the requirements for financing economic activity.

An examination of the monetary situation shows that government action is likely to fail and economic development seriously affected as long as this huge mass of excess currency exists. Therefore the Govenment's main object should be to deal with this situation. It is this consideration which should guide it with regard to expansion prospects and the financial volume of the equipment programme.

Nevertheless we should not ignore the factors which affected the chance of success of the Five Year Plan during its implementation by successive governments.

The Agadir earthquake and the necessary reconstruction represented a heavy burden involving rescue work, clearance and the building of a new town. National savings had to be called upon, since the very generous contribution from international aid could only provide a small portion of the funds required.

The disastrous drought of 1961 seriously affected the revenue due from agriculture, while at the same time drastically reducuing gross internal production. For example, cereal production was only 1,266,000 tons as opposed to 3,213,000 tons in 1963. The production of barley in particular was only one quarter of the 1950-55 average.

Frontier disputes involved extra expenditure for the Government and hence for the nation as a whole.

Regardless of all these factors it is clear that the aims of the Five Year Plan were incapable of achievement since they were too ambitious.

An increase in agricultural production of 3.5 % could not be achieved in such a short time because structural reform and general improvement represent a long-term action requiring considerable investment.

Industrial activity was supposed to lead to an annual growth of 10 % in gross production and require 45 % of net investments. Since private investment was an unknown quantity and State industrial projects were insufficiently prepared, these results could not be achieved.

The discrepancy between expenditure on social activities and infrastructure and the net rise in production brought about an unbalance in public finance and a deterioration of the nation's balance of payments.

⁂

B. — THE OUTLOOK FOR DEVELOPMENT

1°) Expansion, if it is to be healthy, must only reach reasonable levels in 1965-67.

Whatever sector is under review we note that at present the inadequacy of productive investment and economic and social structure make expansion uncertain. Agricultural production is unreliable and is at the mercy of seasonal variations. Industrial investment presupposes a change in the present pattern of private savings etc. etc. Therefore instead of selecting an expansion rate the essential purpose of the plan should be to pattern the reforms to be carried out by the Government.

Although the calculations which can be made for the expansion rate in 1965-66-67 are not very significant, it seems reasonable to assume that the rise in gross internal production will be less than the 6.2 % per annum foreseen but not achieved between 1960 and 1964, and that it will probably amount to a rough average of 3.5 % over three years.

This rate of 3.5 % or thereabouts is still inconsiderable if we take into account all the investment requirements necssitated by the economic " take-off ". At least the country's economy may be taken to the point from which such a " take-of " becomes possible. We must start from present realities and from the deficiencies revealed in the organisation and working of the economy in order to measure the distance we have to cover. An unrealistically high target is discouraging rather than bracing.

Nor must we shirk the fact the creation of new employment by traditional methods will not suffice to deal with the increase in the youthful population and to absorb present unemployment. Other schemes, in particular employment through the scheme known as "Promotion Nationale" must be sought out and omproved. Experience acquired over the last few years will enable us to continue and intensify the "Promotion Nationale" so as to provide 25 million extra working days per year.

This scheme, launched on 15th. July 1965 by the King of Morocco, is intendud to improve living conditions for the rural population by preventing under-employment and soil destruction and by mobilising a fund of potential labour. This could not be achieved by the traditional methods adopted under the Plan.

From July 1961 and July 1962 fifteen million working days were created, which represent 28 million DH in wages and 28 million in payment in kind. To this must be added 7 million DH for equipment and tools.

These figures were kept up in 1962-63 although the abundance and the length of the harvests held up work which was already handicapped in the spring by premature and persistent rains and bad weather generally.

The Three Year Plan will involve more than 70 million working days which represent 179 million DH in cash wages, as well as expenditure on equipment, and more than 150 million DH in payment in kind.

2°) Financially the Plan must remain at a reasonable level

The preparatory work originally set public expenditure at 750 million DH per year, that is to say 2250 million over the period in question.

After a series of consultations this sum was raised to 2425 million to be distributed initially as follows:

— 1965	782 million DH
— 1966	818 million DH
— 1967	824 million DH

As a result of meetings involving the Planning Council and the "Promotion Nationale" this figure was increased to 2461 million DH, distributed as follows:

— 1965	792 million DH
— 1966	832 million DH
— 1967	836 million DH

On publication of the Financial Law for each year it will be possible to make adjustments according to the rate of achievement and financial possibilities.

The section entitled " Finance " in the Plan emphasises the overall consequences of the published figures.

We must face the fact that, although the programme is less ambitious, it poses certain financial and economic problems and that once more the overall success of the Plan must depend on the cooperation and initiative of the private sector.

II. – Pattern of the plan programme

Before examining the targets sector by sector it is perhaps desirable to take a look at the equipment programme as a whole. We must therefore make en appreciation of the methods employed in outlining the programme, the outlook for development in 1965-67, define the main pattern and analyse the conditions which will enable the programme to be completed.

A. — METHOD : The 1965-67 plan must be a new phase in Moroccan planning.

Experience acquired during the previous planning campaign has enabled us to give a new meaning to Moroccan planning. Planning methods may make further progress still in the next Plan especially if certain basic studies are developed.

1°) Planning is indispensable

In a developing economy planning is essential. It acts at three levels : for the country as a whole planning indicates a conscious development ; for the Government it determines certain decisions ; for the numerous private entreprises in the private sector it is a constant point of reference.

Economic progress persupposes that this consciousness is widespread. This is especially important for all the countries of the "Third World". By submitting general policy to a wide audience planning helps to train citizens ; it enables each man to understand the importance of his own contribution. In fact we should never lose sight of this human aspect of planning. The Plan must represent the aspirations of society towards the future we all desire and at the same time find a means for the realisation of these aspirations.

Planning also allows government decisions to be more cohesive by placing them in an overall context. Such decisions mainly concern public investment. The Plan considers the requirements of the various equipment sectors and gives priority to those which are most important to development. Nevertheless planning must bestow a more rational character on the numerous actions taken by the State (tax policy, prices etc.) by emphasising the effect of such decisions on the economy as a whole. Thus it must show to what extent the short-term advantage of some measures (freezing of assets, taxation, etc.) can outweigh long-term disadvantages.

In fact the Plan is a chart for future development to which every economist can refer. In this connection it is essential that the forecast for each sector should be discussed by private entreprise. The more private entreprise is associated with the Plan the more it can contribute.

2°) Although the 1965-67 document is more of a programme than a Plan, it still remains a part of medium-term planning.

The name " programme " is better suited than " plan " to a document in respect of a period in which the main problem is the choice of action to be taken by the State and the method of its intervention. This is perhaps the original feature of the 1965-67 programme as opposed to previous plans and especially to the 1960-64 Plan.

Nevertheless, the 1960-64 plan is still the planner's basis when it comes to examining the growth of Moroccan economy. It gives a detailed survey of development prospects in the various sectors and suggests measures to encourage them. The complementary survey of industrial development gives data on each branch of industry showing extension of existing capacity and the creation of new projects, tagether with the approximate cost of working and the effect on employment.

As a result of the difficulties experienced during the implemenation of the Five Year Plan, especially those connected with financing through savings, further surveys were carried out in 1963 which caused some ideas associated with the 1960-64 plan to be modified.

The 1965-67 plan was laid down on the basis of the Five Year Plan and the work of revision undertaken in 1963. The economic outlook which emerged determined the priority to be given to different sectors and projects.

3°) The Government will work out the next Plan by preparatory work undertaken as from the year 1965.

Experience in planning both in Morocco and in other countries shows that it takes about two years to work out a plan. Thus the

Government intends to make a preparatory study of the next Plan in 1965.

In recent years numerous surveys have been carried out in Morocco. They were concerned either with general questions such as birthrate, agriculture etc, or specific projects. We now have not been used at the best advantage. In some cases extra research is required. The preliminary stage of the Plan necessitates in fact a detailed analysis sector by sector and without this the aims of the Plan cannot be selected.

Surveys at this stage shoud be based on a better knowledge of regional situation. Moreover long-term surveys are required in order to give the Plan a wider outlook and make its final achievement more clear-cut.

Since there are so many aspects to consider we must be selective. Not all research can be equally detailed. First and foremost we should study costs, making exact estimates in the less complex cases (for example, building and maintenance of schools) and then making more difficult calculations of the profitability of definite undertakings and the most convenient date for their realisation. Such calculations will enable us to compare, for each undertaking, investment costs, renewal, maintenance and working expenses, and at the same time all advantages, now or in the future, which may be excepted directly or indirectly therefrom. Thus the planning department and the technical departments concerned can work out together a method for selective investment, which has so far been lacking and which is essential to real planning.

Special efforts will have to be made in the preparation of specific projects where foreign aid is involved. The Ministry of Economy and Finance will see to the preparation of projects and to the co-ordination of studies allowing for the publication of technical, economic and financial data.

B. — OUTLOOK FOR DEVELOPMENT DURING THE PERIOD 1965-67 : We must lay the foundations for a lasting economic expansion without harming our financial position.

Firts of all we must emphasise the reasons why expansion is essential and the conditions under which it can be achieved. Next we must determine the rate of growth which we can maintain in order to arrive at the amont of financing the programme will need over the next three years.

1° - Morocco's economy must expand.

The chief problem is to create the maximum number of jobs. The active population is at present growing at the rate of more than 200 000 persons per year and will amount to 7,500,000 persons by 1967. Moreover, 20 % of men of working age, that is about 600,000, are at present unemployed and this proportion amounts to nearly 50 % in the case of women. This situation is different in the towns, where there is wide-spread unemployment, from that in the countryside where under-employment is the general rule.

Thus the outlook for the next few years shows that the situation is likely to deteriorate on account of the rising birth-rate. As long as the latter remains high and the country adopts no policy to control it, economic development will always lag behind. According to the forecasts the present birth-rate of 3 % will be maintained. This means that unemployment and under-employment will get worse whereas, as a result of more wide-spread schooling, workers will be better educated than in the past.

Present living standards are low. According to some estimates the average annual expenditure per household would be about 2500 DH in 1960 and per capita income 450. Moreover this average allows for wide differences according to social and trade categories and according to areas. Standards are particularly low in under-developed areas such as the barren regions in the south.

Thus the creation of employment and the improvement of living standards demand a policy of expansion which has not so far been achieved with any continuity in Morocco and which requires a sustained effort on the part of all concerned. Emphasis should be placed on the methods to be used, especially those of the " Promotion Nationale " which intensifies the efforts of the whole population by allowing it to participate in the building of a modern economy.

At the same time the experience gained during the period of the Five Year Plan sufficed to point out the difficulties in the way of economic expansion. In fact the aims of the 1960-64 plan were only partially achieved. Gross investments, for example, were far behind those forecast. Besides this it should be noted that the small successes attained were only attained as a result of increased tension.

2° - Expansion must take place under balanced conditions.

Morocco's economy is subject to strong tensions which could cause serious damage unless a policy of expansion is accompanied by the maintenance of a strict equilibrium in the economic and financial field.

These tensions appeared during the implementation of the 1960-64 plan and from 1964 onwards called for special measures to redress the situation. Drastic action was taken as regards public expenditure and the draft financial law for 1965 outlines an equilibrium between actual resources and permanent expenditure, the inevitable deficit being strictly limited and justified by the need to carry out the investments provided for in the Plan.

The departments concerned with economic improvement are to be re-organised by the amalgamation of the O.N.I. (Irrigation) and the O.N.M.R. (Rural modernisation), the I.N.R.A. (Agronomic Research) being combined with the Ministry of Agriculture. This re-organisation will lead to greater efficiency at less cost. Commercial and monetary measures have been taken to deal with the increasingly awkward situation of payments in foreign currency. Obviously no fresh balance can be struck in a period of recession ; but a certain respite was needed in order to base economic relations with foreign countries on a firm foundation leaving less to the hasards of the moment.

C. — PRIORITIES UNDER THE THREE YEAR PLAN.

It is much harder to guide than to order. **But we shall have a better chance of achieving our aims if we try to promote and harmonise private enterprise rather than squeezing it into the strait-jacket of planning along with all economic activity in the country.**

For this reason the Government can only act as a real stimulant if it adopts a pragmatic attitude to the situation existing in each sector, whether it be agriculture or industry, tourism or handicrafts, training or recruitment. Where the State proposes to make good, in certain areas, the deficiencies of the private sector, its intervention is essentially intended to create the natural conditions for growth and not to strangle such growth.

The development and the modernisation of agriculture are needed to feed a constantly increasing population, to create an exportable surplus, to widen overseas markets and make industrialisation possible.

Structural reform should help to increase production and not hinder it. Thus it should encourage the progressive development of the rural population and not bring about abrupt changes likely to upset the present balance without introducing a new one.

The development of tourism should enable us to increase our holdings of foreign exchange provided that a systematic effort is made to organise existing resorts and develop accomodation. But the success of such a policy presupposes that both the Government and the private sector are closely co-ordinated as regards both equipment and training.

Industrialisation, although it implies an investment programme not entirely dependent on the State, is also a basic aim. Little by little it will absorb available manpower and will help to raise the standard of living of the population.

Finally a **training scheme** must be intensified in order to enable the economy to be better organised both in the public and the private sectors. So long as an adequate staff is lacking it is idle to think of re-organisation. The problem of schooling in rural districts is much more one of quality than of quantity. We must in fact seek a higher quality of teaching and a means of guiding young people in the right direction.

These four aims imply a long-term effort which will go far beyond the three year plan. Nevertheless, within the Plan itself, these aims must have **priority** as regards resources.

The restrictions on expenditure in other sectors means that some activities must be postponed or spread out over a period in favour of more worthwhile investments. It is possible that in some cases (telecommunications for example) there will be a delay in satisfying the requirements of various departments. The Government will see to it that these delays do not affect priority operations such as industry and tourism.

But the carrying out of a programme with definite priorities assumes that in each sector there should be a clear-cut policy. This is especially true of agricultural improvement. It would have been no use selecting priorities if, instead of carrying on activities most favourable to economic development, these priorities represented a squandering of public money. Therefore in each sector the Government must make decisions over the next few years to ensure the effective implementation of the Plan.

1° - The main object of agricultural investment is to develop production.

Agriculture employs 70 % of the population capable of working. It makes up a third of national production and accounts, directly or indirectly, for 42 % of sales to foreign countries and 30 % of private consumption.

Nevertheless, in this sector, which takes pride of place in the country's economy, methods are of the most rudimentary kind and the living standards extremely low.

The development and the modernisation of agriculture are essential if we are to meet the growing requirements of the population, maintain Morocco's position as an exporter of agricultural products and increase the income of the farmers. But, as experience has shown over the last few years, this means a long-term transformation of the rural scene.

Improvement of natural conditions of working presupposes various activies such as soil preservation, reafforestation, construction of dams and irrigation systems. These take a long time to prepare, to carry out and to work.

In order to adapt men to modern methods we have to face many delicate problems, the spread of new techniques, a change in the distribution of land and the method of working it, the organisation of markets etc. Such changes, which can only be gradual, demand a numerous, active and efficient staff.

Agricultural policy is dominated by two sorts of consideration. In the first instance the accent is on the need to create jobs and raise the standard of living of the huge agricultural population. In the second cases economic considerations prevail and the emphasis is placed essentially on production, which is intended to feed a fast growing population.

It is important to place these considerations in their right order. The object of an agricultural policy is to develop the quantity of products available for internal consumption and for export. We must avoid hastily improvised schemes which cause a disastrous setback to this production. Structural reform and new working methods must be applied at the perimeter and the rate of progress should be such that it is always possible to check the effect on production. The same is true of all measures connected with marketing.

For this reason agricutural aims should be classified as follows :

1) Extension of the areas at present worked by modern methods ;

2) Organisation of working methods on land already worked by modern methods ;

3) Preparation for change in the case of areas which will be worked for a long time by traditional methods.

a) Improvement of areas worked by modern methods involves :

Major irrigation areas : Areas already equipped in previous years must be watered and existing hydraulic devices must be fully employed. In irrigated areas production must be geared to intensive cultivation which is highly profitable and which gives employment, especially such as feeds industry (cotton, beet, etc.)

The plains and plateaux of the Atlantic coast must be used to increase the output of cereals, to widen the range of cereals grown and to intensify animal production.

Improvement must follow certain general principes.

In the first place it must consist of integrated action, which alone can bring about complete modernisation. In order to transform the physical and human background such action must deal at one and the same time with land-holding, legal aspects of cultivation, technical methods and marketing. It must bring about a radical change in the traditional system of working the land. This system is based an age-old balance which has adapted itself to the irregularity of the climate as well as to a lack of real working capital. Half measures are bound to fail and are dangerous because they upset this balance. Only total progress can succeed.

It is also important to emphasise that agricultural action should not concern itself solely with the distribution of subsidies or other social benefits. It should above all be based on economic profitability which alone can provide a solution to social problems.

The State must not be a mere hander-out of subsidies, for it cannot replace the efforts of the individual. The peasant's prosperity and that of the nation depends on his own stubborn work. The State can sustain and encourage but nothing can replace the daily labour of the agricultural community.

In conclusion, agricultural improve implies not mere passive acceptance but active participation by the farmers in the efforts of the Government. Experience has shown that a contractual relationship between the State and the farmers is an aid to modernisation. Such a system will be highly encouraged in the future since it allows for a flexible combination of freedom of entreprise for the farmers together with the duty to ensure the best possible exploitation of the capital they own. Along with the extension of the contractual system, additional measures will be taken to give legal backing to modernisation, two main ideas being operative here :

— Stade investment must be made to pay by complementary activity required at working level ;

The additional value given to private property by State action must be made to benefit the population as a whole and to intensify agricultural investment.

On the basis of these principles improvement can be adapted to different geographical situations. It should be applied especially in the following cases :

1) In irrigated or irrigable areas where a start has been made with modern methods and planned production and where

the land-holding system permits new arrangements. Generally speaking these areas are the following : Basse-Moulouya (left bank), Rharb and Tadla ;

2) In dry cultivation areas where the climate is satisfactory enough to make irrigation unnecessary, i.e the Meknes, Fez and Rharb areas. Improvement must be accompanied by a reform of the land-holding system which will gradually be introduced taking into account the long time needed to transform a rural community.

State intervention should allow for planned production by giving priority to activities which can be more speedily carried on in certain areas, such as, in the case of dry areas, specializing in forage and meat, replacement of barley by high productivity wheat and, in the case of irrigated land, replacement of cereals by cotton and beet.

b) Development of traditional agriculture : the fight against under-employment and the restoration of marginal areas.

Although the scarcity of capital means that is must be concentrated in privileged areas, maintenance of living standards as well as employment and land preservation calls for specific action in less production regions. This is the task of the " Promotion Nationale ", which uses the potential strength of under-employed people as a real investment. Thus it will be able to improve marginal areas. In mountain areas this organisation will deal mainly with reafforestation, fruit-growing etc.

In semi-arid areas the main task will be the improvement and extension of irrigation. With a minimum of monetary resources and with the support of the population this method, where the relationship between capital and labour is reversed, should bring about a reduction in rural under-employment, regularise production and lessen economic dualism. In this respect the " Promotion Nationale " holds the fort economically speaking until the productive or industrial sectors are sufficiently well established to absorb the excess population of the countryside.

Implementation of the Three Year Plan means that we must continue in their entirety the efforts being made at present to improve the central administration of the Ministry of Agriculture and to emphasise the importance of regional activity. The reforms will only have the desired effect if at the same time staffing and credit problems are solved for the duration of the Three Year Plan.

Modernisation of agriculture must go hand in hand with industrialisation. The two movements cannot be separated. Without industry we cannot have a rapid increase of the productivity of work and provide agriculture with modern methods on a large scale. Also, in order to import more equipment for industry, we must increase our exports of agricultural produce and reduce our imports of foodstuffs. The priority given to agriculture therefore aids industrial development.

2° Industrialisation depends on the systematic search for markets and better relations between the State and free enterprise.

Industrial development did not enable us to achieve the results aimed at under the 1960-64 Five Year Plan.

The delay is first of all due to a lack of markets. The home market, which consists of 12 million people with small purchasing power, is not sufficient to market all the products to be supplied by a modern and diversified industry. In order to reach the profitability mark firms must either stick to the most popular ranges of goods or else go in for small-scale production using the half-finished products of foreign industry.

Industry is thus poorly integrated and dependent on foreign countries. Apart from textiles there is practically no case where it has been found possible to carry out in this country a complete series of operations leading to the manufacture of a given product. More than a quarter of intermediate consumer goods are imported directly. As regards exports, these have only been developed in some sectors (phosphates, fish canning etc.) where Moroccan economy can successfully compete on the international market.

Industrialisation requires a big effort to train labour and other staff as well as developing a spirit of enterprise among holders of capital, who are more tempted by commercial speculation or real estate than by long-term productive schemes.

Industry can only develop by gradually overcoming these difficulties. This will be easier if Moroccan economy is not isolated from the main currents which unite the nations of the world and if it forms part of a wider entity. Industrial development can now be based on production capacity which is not employed to the full. It should be guided by the following considerations :

a) Organisation and protection of the home market :

The supplies between different branches of activity constitute an important home market which should be developed by better co-ordination of production plans. Much has already been done in this field, since all State contracts carry a clause giving preference to local suppliers. Nevertheless existing measures must be improved and there are still a great many gaps in the system.

The main factors in co-ordination consist of information and daily contact between different economic agencies, especially between producers and the administration.

The protection of the home market will be maintained and perfected. It is essential for the ripening of an economy undergoing modernisation. It must not however go beyond certain limits. In fact it can lull agricultural and industrial producers into a sense of false security. If it is too widespread it also tends to send up internal prices, thus rendering the activies of the country as a whole unsuitable for export.

The present system of protection may be considered as a whole adequate. It only remains to smooth it out and make it work better.

Customs duties, the main piece in the armoury of protection, were raised in September 1961 to a level which we cannot overstep if we wish to preserve healthy competition in the country. The modifications which are contemplated will either tend to lower the local price of some goods, to abolish or reduce some unjustifiable forms of protection, or, in exceptional cases, to increase aid which may appear at present inadequate.

These refinements in tariff policy also presupposes a revision of customs classification and a reorganisation of customs administion, questions which are being studied. In these circumstances quotas will become a rare phenomenon. They will be used above all to help new industries during the first few years or to keep at a reasonable level the import of goods the price of which is fixed on the international market by abnormal commercial procedure.

b) The search for overseas markets.

Exports now give essential support to a large number of industries and are to a great extent indispensable for industrial expansion based on modern methods. Industrialisation in Morocco cannot avoid the rules for productivity and technical imperatives which hold good for the development of industry in the world. Although in certain restricted branches these rules can be adapted to local conditions, our industrial apparatus must be able to function according to wholesome principles of production and profitability. Therefore something must be done to help out the inadequate home market.

The development of industries serving the export market is also an important aim of our industrialisation policy. It is based chiefly on the exploitation of our natural resources, for example, canned fruit and vegetables, canned fish, phosphatic fertilizers etc. It can include processing of imported raw or sem-finished materials. However, this latter activity should only be concerned with products which are not too weighty and where the extra value given to it locally is high. It implies the use of highly productive processes, a competitive level of wages and the existence of regular outlets on the market. In the long run a new formula will doubtless be developed, but for the time being it can only be applied in exceptional cases, especially in view of the high cost of electric power in Morocco and competition from countries having cheap labour.

c) A policy of State intervention and encouragement.

Despite the undeniable success of certain institutions, the complexity of procedure and the multiplicity of organisations created over the years, industrial development has not yet received sufficient stimulus. In the Three Year Plan the Government will try to have a clearer view on industrialisation and more efficient methods.

A sector in which the State can intervene is essential for industrialisation, either to create basic industries or to take the place of private enterprise where the latter is insufficient. Nevertheless we must distinguish clearly between restricted sectors where the State has the monopoly and where it intervenes on a competitive basis by taking up shares. In the latter case the State intends to play the part of referee or to help out private capital. However, there is nothing final about the arrangement and the State should consider handing over its shares as soon as this becomes possible.

As far as surveys are concerned, we should avoid competition between departments and semi-public organisations, which is costly for the country's economy and hampers the private sector in carrying out its projects. Activity of this sort should be regrouped and surveys already in hand should be more strictly controlled.

Further improvements could be made as regards the method of intervention by the State, especialy by an improvement and simplification of the Investment Commission, also by rendering more flexible the procedure for using the credits of the National Investment Fund.

Finally certain aids have been created to encourage investment, in particular by tax rebate and subsidies. The latter represent as a general rule 15 % of the amount invested. The effectiveness of the system implies that relations between the State and private entreprise should be defined in more or lss contractual terms, whereas the obligations of the entrepreneur regarding the capital to be invested or the employment to be created are compensatd for by receiving privileges from the State, including, in the case of foreign capital, security for funds invested and guaranteed re-transfer.

3°) Development of tourism may be extremely important if a coherent policy develops at one and the same time public and private equipment and the training of hotel staff.

Tourism in Morocco is still increasing. Despite its relative distance and the lack of accommodation more than 300,000 tourists entered Morocco in 1964. This has an important effect on the balance of payments. Its appeared reasonable to aim at **double the tourist trafic** during the period of the Three Year Plan provided that an effort is made in three fields :

a) The State proposes to build roads, lay out new tourist areas (water, electricity, reafforestation etc.) ;

b) Considerable private investment is expected in the hotel business. We are aiming chiefly at medium-style hotels and new systems (motels, holiday camps etc.) rather than luxury hotels which Morocco already possesses. It would appear that large sums in private capital may be invested in this sector. Nevertheless, in some sectors State capital will help private entreprise.

c) A considerable training programme will be undertaken by the special branches of the Ministry of Education in order to provide staff for the numerous jobs which will be available in the hotel industry. Moreover the urgency of the situation calls for a parallel training system " on site ". In fact the training problem will determine the success of tourism in Morocco. The aims of the Plan are both ambitious and attainable.

4°) Professional training is essential to economic and social development

Following on the policy of the Five Year Plan the Three Year Plan also gives priority to professional training. But the partial implementation of this plan now enables us to measure the extent of the quantitive and qualititive problems we have to face. It also gives us to think.

Financial difficulties force us to think in this way and neccessitate one essential condition. We must slow down the increase of educational staff.

This slowdown is also necessary for technical reasons. As regards the first degree the primary cycle brings a mass of pupils to the secondary stage which is difficult to absorb and insufficiently educated. If we continue to follow this objective without setting a certain level we may well compromise for many years the most important part of our training programme, that is to say secondary education.

On the other hand as regards the second degree, the inevitable lowering of standards will be dangerously aggravated by the shortage of teachers. In order to deal with the situation it will be necessary for the best elements issuing from the University of Morocco to take up teaching, which is not so far the case.

As regards **university education** we must try to strike a balance between the basic university education given by the University of Morocco and a more thorough education provided by foreign universities.

Nevertheless the quantitative " pause " should serve to carry out essential reforms. The transfer of personnel during the Five Year Plan — contrary to predictions — as far as technical education is concerned, is no longer subject to the same causes. In this connection the Three Year Plan Will try to regroup teachers and improve equipment.

We must no doubt make a better adaptation of the system in the first degree on a more realistic and less costly basis, since massive schooling is one of the objectives of government policy.

Professional training must take more account of the labour market and provide a better basic education followed by technical education in close co-operation with business firms. It should enable young people and adults with little schooling to better themselves.

The Government itself should seek more systematically to train its own staff. Organisations concerned with agriculture have much to do in this line.

In the light of what has gone before it will be seen that training is a problem. It is only by taking firm decisions that we can achieve the necessary results taking into account our straitened financial circumstances. We must find a team to work with the Under-Secretary of State for Technical Education, small but efficient, to tackle the question of professional training.

5°) Moroccan economy must develop its relations with foreign countries by forming part of larger economic groups which can step up trade between itself and its neighbours.

Foreign trade is most important for Morocco's economy. Imports represent 20 % of its resources and exports account for 16 % of these.

The development of exports, which should be accompanied by a diversification of present commercial trends, presupposes that the present tendency should continue.

Therefore we must co-ordinate our action better and improve our programmes. The co-ordinating force should be the Ministry of Commerce where a committee is to meet once a month consisting of the chief organisations and departments concerned along with representatives of producers and traders in order to study the main problems connected with foreign trade. Moreover improvements must be made in respect of programme preparation and agreements.

Measures must also be taken to develop aids in favour of exports. A study will thus be made of a form of "prospection insurance" which will partially guarantee exporters against the risk of non-amortization of expenses incurred in attacking a market. At the same time we may consider a pre-financing credit designed to cover surveys, supplies of raw materials, laying down of stock for export etc. Mobilisation of credits enabling exporters to be paid immediately after delivery could be extended over a longer period and be more flexible. A system of credit-insurance is needed to cover the risk of short-term insolvency and risks involving political or other distrubance preventing the transfer of funds paid by the debtor or short-term risks arising from arbitrary action.

Owing to the importance of trade with the Common Market (59 % of exports and 56 % of imports) and especially with France (30 % of exports and 43 % of imports), everything depends on negociations with the E.E.C.

Some co-operation must be worked out with the E.E.C. in order to define conditions for technical co-operation and investment possibilities. Ortherwise trade between Morocco and the Six will become more difficult owing to competition from countries producing similar goods who have already reached an agreement ith the E.E.C.

The constitution of a free-trade area with the Common Market will be important for Morocco especially as regards the transfer of industries employing a numerous and relatively unqualified pool of labour. The example of Greece shows that association has had remarkable effects on industrial development by attracting considerable foreign investment in heavy industry.

Nevertheless any agreement with the E.E.C. must must be compatible with economic relations between Morocco and the Maghreb.

The development plans laid down at the Tunis Conference were clarified by the Tangier Conference which set up institutions to promote such development. We are already agreed on the necessity of privileged trade links between the countries of the Maghreb and on a harmonisation of tariff systems, as well as a common export policy to foreign countries. The countries of the Maghreb must now agree on the new relations they are to have with the E.E.C.

Co-ordination of the economy is a vast problem since it covers a multitude of different activities. The process by which this aim can be achieved has been defined. The first thing is to make a census of the potential and the needs of the four countries. The next step is to lay down a programme of surveys in order to arrive at co-ordination. Some urgency occurs when it is a question of projetcs immediately capable of execution which have been put before the different governments.

The final phase is the search for means by which projects can be financed.

Closer co-operation in the field of industry will enable us to widen the market for Maghreb produce and might even lead to common production units for some basic or processing industries. It seems that key industries are nearly always industries with large-scale production and, as regards processing industries, co-operation will ensure standardisation an sharing of models. Duplication of investment can only lead to a squandering of national capital, aid from abroad and increased costs.

In order to carry out these tasks the Tangier Conference created the Centre for Industrial Studies in Tripoli.

Although the possibilities for trade with the **African continent** are not very clear, there have been numerous agreements and contacts between the various countries. Morocco will play its part here.

D. — METHODS FOR IMPLEMENTATION :

Achievement of the Plan is subordinated to a series of measures.

When defining the direction which the various priority sectors should take, we mentioned certain particular measures. We must now make a general statement of these which have to be taken and distinguish between those which will render government departments more efficient and those which will enable us to redress the financial situation.

1°) The State should improve departments dealing with the nation's economy.

Without embarking on administrative reforms affecting all public services the Government has decided to take certain measures in the following fields :

a) Planning.

In a developing economy a central planning organisation must be a constant source of ideas enabling the authorities to be constantly engaged in activities favouring expansion. This organisation will be named the " Délégation du Plan " (D.P.) Its activity will be threefold. First it must have an overall view of economic problems and the long-term and short-term outlook. It must stimulate the various departments by observing their surveys and preparatory studies, while proposing reforms to the administrative structure. It must also see to the technical preparation of projects and co-ordinate them, especially as regards specific projects involving foreign aid.

In each ministry the D.P. will have agents at a sufficiently high level acting as technical advisers in questions of planning.

An inter-ministerial planning committee must be formed composed of the ministers concerned. It will be notified periodically of the progress of the Plan.

b) Reorganisation of departments and establishmments dependent on the State or controlled by the State.

Under the section headed " Agriculture " the Plan contemplates the main policy for reorganising departments. This concerns both the part played by the Ministry of Agriculture and the intervention of local authorities.

The organisation of agricultural improvement services (Offices de Mise en Valeur) must be re-examined. Everyone is well aware of the present situation in which there is a dissipation of effort, a watertight system of responsibility and an amount of red tape worse than ever before. The main causes are well known, that is to say an excessive centralisation leading to a concentration of staff at the centre as opposed to men in the field, also an imprecise delimitation of the areas where intervention required and a faulty distribution of work among the regional representatives.

It would be unreasonable to question the justification of these departments. On the contrary, we should try to find out what good they can do in the way of flexibility of action, mobility, efficiency etc.

The main principle is to concentrate intervention by departments inside geographical areas strictly defined, but examined by departments in complementary fashion. Such concentration would not exclude " work to order " for another department while putting existing material to rational use. It would also not exclude the possibility of using the departments as specialised organs at regional level at the request of Governors. The would thus act as work centres enabling the Governors to carry out work of regional interest for which the assistance of the " Promotion Nationale " might be requested but which would go beyond the technical scope of such ordinary activity.

For such concentration to be effective genuine action units must be formed on the spot under some real authority which can make decisions and has the necessary means at its disposal. Provincial authorities will be closely associated with these.

On the basis of these principles practical steps must be taken. Means which are at present dispersed among several organisations (research for example) should be amalgamated (O.N.I. and O.N.M.R.), advantages should be offered to staff serving in certain provinces, specialised courses should be organised etc.

As regards **industry** the measures suggested under this heading can be explained by the desire to define more clearly the competence of State intervention. It is certainly necessary to regroup survey teams. We have already noticed that the administration is incapable of controlling and exploiting such survey teams, especially in the field of industrialisation. The State should pay more attention to the conditions under which surveys are selected, lay down the correct bid specifications and put the results of the surveys to some use. Such regroupment should include a revision of the part now played by the B.E.P.I., which should be generally concerned with surveys while the management of industrial participation should be in the hands of the Treasury.

c) Organisation of provincial departments.

In order that the provincial authorities should be able to play an active part in the preparation and implementation of the Plan, the following measures should be contemplated :

- Technical services should be reinforced in some provinces where there is insufficient staff at the moment, advantages being granted to personnel appointed there ;
- Technical planning committees be formed composed of the heads of technical departments responsible to the Governors.

d) The direction which the " Promotion Nationale " should take.

During the 1965-67 programme the "Promotion Nationale" will carry on and it intends to surpass its present average of 13 million working days per year. This is essential, since the absorption of male under-employment alone represents 75-100 million days.

The main objective is to make the action of the P.N. profitable by laying down a sort of profitability scale taking into account such factors as production requirements, monetary and human investment possibilities and the chances of implementation.

The training of P.N. staff is also important. In fact the scheme should not only remedy under-employment but help towards the advancement of the labour force. This could lead to real economic and social development and would also help the Plan. Changes would have to made and we can imagine huge working sites enabling us to fight against urban unemployment as well as rural and to mobilise man-power and capital.

e) Working methods in the administration.

Planning is tied up with the civil service. A "Commission de Fonctionnement" wil be set up concerned with the efficiency of the administration. It will consist of 4/6 members which will be empowered to enquire into the work of the different departments. On the basis of such enquiries recommendations will be made to the Government regarding staffing matters.

2°) Financial recovery requires, apart from immediate measures, certain long-term decisions.

The Financial Law for 1965 contains some immediate measures for recovery but long-term measures are required, in particular means of obtaining the reimbursement by individuals of services rendered by the State or establishments under its control.

This principle applies particularly to agriculture where we must define the limits withing the State must subsidise investments and working expenses while obtaining the maximum participation from the beneficiaries. The Government will study a system of financing by which non-reimbursable expenses (surveys, irrigation, land clearing ,water points, buildings etc.) would be borne by the budget, whereas agricultural credit would take care of the financing and would reimburse other expenses (livestock and minor equipment, plantations, stables and housing).

We must also consider the question of rates to be charged for the principal utilities (electricity, communications, railways, harbours etc.)

On a long term basis a proper replacement programme for the equipment of these services will be impossible unless we revise our system of charges and our accounting. In fact the accounting methods in force do not give us sufficient or accurate enough information on the various items. Thus accounting cannot be done on a firm economic basis. Moreover, in some cases the general level of charges is such that there are regular deficits even at the level of working accounts.

The following are the deficits foreseen for the 1963 budget :

— Port of Kenitra	2,257,967 DH
— Port of Agadir	1,251,576 DH
— Minor ports	2,893,160 DH

In the 1964 budget, the budgets for all ports other than Casablanca are contained in a single budget which supposes a working deficit of 6,280,077 DH.

As regards railways the deficit for 1964 is estimated at 50,000,000 DH.

Measures for redressing the balance are of three kinds :

— Etablishment of an economic system of accounting
— Adjustment of a general level of charges
— De-equalization of tariffs.

a) System of accounting.

The rules for public accounting classify expenses according to their nature (personnel, equipment et.) and not according to their function. On the contrary, the rules for industrial accounting allow for a separation of working expenditure and current maintenance from expenses connected with major maintenance, renewal and modernisation of equipment. Analytical accounts examine, for each category of expenditure, variations in volume for different services.

The latest rules for amortization show the amount of the various sums to be earmarked each year for working accounts in order to cover exceptional expenses, especially renewal of equipment.

This principle is already applied generally by the O.N.E. (electricity) and the O.N.C.F. We must nevertheless see to it that these rules are in keeping with the latest economic principles. We must also bring in a calculation of the cost of development of the different types of equipment.

More important progress must be made in the field of telecommunications, where the rules of public accounting do not allow for sufficient distribution of charges between the different categories of services nor a correct calculation of amortization charges or development costs.

Above all re-organisation is urgently required as regards seaports. Although a certain regrouping has been effected in the budget, accounting for all ports must be completely separate. Each port is in fact quite distinct and each has quite separate economic functions.

Apart from this, it will be seen that in the equipment budgets for the different ports there are some operations involving major repairs and renewals which are normal and predictable. Such expenses should be regarded as normal working expenses and should be charged, in accordance with ordinary amortization, to the working account. These charges re-occur in the calculation of the cost of different services. As regards the expenses on equipment intended to increase the capacity of existing installations, these should be accounted for in the cost of development. It will thus be apparent that the working deficits of sea-ports are incomplete and that the real deficit, properly calculated, is much higher.

Generally speaking, a check on economic accounting will show up unprofitable activities which should be done away with as soon as possible. As for the other activities which have proved profitable, an economic accounting system will give the information needed for a revision of charges.

b) Adjustment of charges

The authorities have sometimes been forced to block the charges of public utilisies in the general fight against rising prices. Such charges affect the cost price of numerous industrial entreprises, and their variations have an exemplary affect on public opinion. Nevertheless, if we fix these charges at levels which cause systematic deficits the economic balance will be upset with even more serious consequences.

The situation is such that budgetary subsidies are distributed to all users of public utilities in proportion to the services they enjoy. All users of the railways system in fact receive subsidies from the State whether their activities help Moroccan economy or not.

The users of a secondary port like Kenitra pays for the services of the port at a much lower figure than the cost price and are all subsidised by the State even if their activities do not help the economy of that area.

Generally speaking, a lowering of charges leads to an increased demand on public utilities. For example, if the railways raised their charges to a realistic figure some firms would prefer to use local entreprises and would thereby save on transport. The net result would be favourable to the national economy.

On the other hand when charges are at an artificially low level demand is increased and new investment is required. Harbours must be enlarged, new docks must be constructed, new cranes, new waggons etc.

In fact receipts from charges levied do not as it is cover normal working expenses. It is obviously impossible to finance new investments without asking for fresh funds from the already overburdened Treasury.

In short abnormally low charges subsidise blindly the whole of our present consumption and encourage consumption in the future without providing the funds to pay for it.

Thus we must urgently revise the charges for all sea-ports other than Casablanca and also for the railways. Such revision will raise awkard problems for entreprises which have been developed abnormally under the protection of subsidies. Special temporary measures may be necessary to enable a gradual adjustment to be made. Perhaps some entreprises will demand permanent subsidies for special political or economic reasons and the amount of such subsidies must be fixed at a reasonable rate.

It would appear that the situation is more satisfactory as regards tele-communications and electric power. The question will nevertheless have to be reviewed.

c) De-equalization of rates of payment.

Most public utilities provide a wide range of services and therefore a wide variety of rates is charged. It often happens that, since accurate information on analytical accounting is not available, there is uncertainty as regards the cost price of some utilities. Often too, as a result of a limited conception of public services, there is a systematic equalization of rates for different utilities. Thus, even if a balanced budget is assured, some services are rated below and others above their real cost. This means that on a small scale the drawbacks mentioned above are bound to occur. Some activities are covertly subsidised and show abnormal development, whereas others are overburdened and their activity slows down.

We should therefore use all the information supplied by analytical accounting and by economic surveys to de-equalize rates as far as possible. Where demand is regulary increasing the best rate will be that which covers not only the working charges involved by services supplied but also the cost of equipment development.

Thus, over a long period, taking into account the fact that income and expenditure must be brought up to date, a balance must be struck between income from rates charged on the one hand and, on the other hand, the expenses of working the service, renewal and development of capacity.

Moreover de-equalization encourages expenditure involving lower charges now and in the future and discourages heavy outlay.

Rate-fixing by the O.N.E. is partly guided by these principles but the fact the O.N.E. is in direct contact with only some of its customers restricts the efficiency of measures adopted.

Perhaps the general application of these principles in Morocco raises awkward problems, especially as regards railway transport. It might reveal the non-profitability of certain systems of transport and, in particular, of some lines. Transitional measures and even some exceptions to the rule will doubtless be required. But de-equalization of rates will certainly lead us to question the economic profitability of some regional policies and enable us to correct them before they prove too expensive to the country.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

III. — An attempt at regionalization

In order to trace a policy for regional development and to facilitate the carrying out of the programme in each province and town the Government has attempted to regionalize the action contemplated under the 1965-67 Plan.

Such methods would have enabled us to give a more practical content to planning and to interest local authorities and people more directly in the Plan.

But regionalization was only introduced quite recently in countries having a highly developed technical and administrative background and requires the most detailed preliminary surveys with numerous trained staff and an elaborate planning mechanism.

Moreover the geographical distribution of operations cannot be completed until the financial total for equipment in each sector is finally settled, that is to say until the programme is finally adopted by Parliament.

For this reason it was decided not to include these provisional projects in the Plan since their interest would have been purely of a statistical nature in view of present ways and means.

The task envisaged will not have been unprofitable if it enables us to undertake further planning projects on a basis of wide decentralisation.

It would already appear possible to lay down criteria for the new procedure which involve a selection of projects on the following basis :

— the object of operations according to the category of equipment, that is to say whenever we are concerned with operations sufficiently important for a connecting link or a definite project to exist, as is the case with investments related to communications (ports, roads...), electric power, hospitals etc. ;

— the total financial outlay for a definite category of equipment whenever it is impossible to particularise an operation in advance and when its future location is therefore as yet unknown. This is the case with small projects, especially agricultural projects.

The papers drawn up for each province will be a most valuable labour investment. The programme will be implemented on the basis of these papers by the provincial or local authorities, who will thus be able to know about proposed operations in advance and prepare for their execution.

The Government also intends to give greater initiative to provincial authorities when it comes to planning. It will therefore make a distinction, when consulting the papers for each province, between two types of investment, viz : **National investment** (ports, roads, major hospitals, higher educational establishments etc.), which must be decided on at national level since they concern the country as a whole, and **regional investment** for which the provincial authorities could make proposals or decide on the distribution of the investment programme **within the totals fixed for each province by the central authority.**

The Government will therefore study measures for decentralisation to be founded on the regionalisation of the Plan. For each major category of equipment it will envisage methods of ensuring the participation of governors and provincial councils in its decisions. The regionalisation of the 1965-67 Plan, although it is still only an experiment, provides hope for the future in view of the possibility of fruitful co-operation between the central and the regional authorities.

This hope will become clearer with the clarification of the pattern of development in each province. Morocco is rich in possibilities and skills which, in the present stage of development, are not always properly analysed or exploited. We should not therefore underestimate the importance of all the sociological and economic surveys which help us to know the country better. It is these surveys which will enable us to apply " geography with a purpose ".

The pattern of development can only be sketched roughly at present. Although national planning is based on statistical data and surveys, regional planning is based on very sparse information. The first duty of the provincial and local authorities will be to fill this gap.

But it is obvious that the unbalance betweenthe modern and the traditional sector is reflected in the disparity between provinces. In fact a small portion of Moroccan production is centred on a small area. Casablanca alone accounts for 15 % of overall home production. Casablanca province, as opposed to the city, which contains 14 % of the rural population, produced about 23 % of agricultural output in 1960. On the other hand the three southern provinces of Ouarzazate, Agadir and Ksar-es-Souk, comprising 18 % of the rural population, only accounted for 10 %.

Disparity in production also appears in comparison of income and equipment. Health services and educational equipment vary to a great extent and rural areas are well behind urban areas.

This disparity between provinces developed for a whole century while Moroccan economy was becoming more dependent on foreign trade and a modern sector was growing up. New industrial activities were growing up near the ports and a modern agriculture in the plains. Thus Morocco gradually swung towards the northwest Atlantic coast.

Migration clearly shows the attraction of the prosperous northwestern areas. But it does not permit a better equilibrum since overpopulation in the towns creates unemployment and the high birthrate in the countryside makes for under--employment.

Thus government policy is making a great effort in backward areas. It aims chiefly at encouraging investment in areas other than that of Casablanca/Mohammedia. It also aims at reforming and developing agriculture in certain zones such as the Riff.

Nevertheless such disparities are due to tendencies which have been operative over a long period and still affect the localisation of activities. Thus there can be no question of removing them immediately. Moreover it would be impossible to counter some of these factors without upsetting national development as a whole. For example, development of foreign trade is favourable to the development of port industries and modern agriculture intended for export has an advantage in being located near the big ports in the north-west.

Government policy should concert its particular action in terms of the possibility of development of each zone. Progress in one area is ultimately of advantage to the whole of the territory. It is only a strong expansion of the economy, based on a profitable operation of local resources, which can in the long run lead to a lessening of the present geographical unbalance.

We must therefore emphasise the fact that the concentration of industrial activity in areas which have already been industrialised is a factor making for profitability in view of the numerous advantages brought about by the complementary nature of the different branches, technical interdependence and concentration of financial management. Whereas this concentration brings us a certain economic advantage, it is also at the root of the social problems arising from urban development. We must take these two aspects of the question into account when determining the aims of our development policy on the Atlantic seaboard.

At the same time we must stress the economic advantages of a policy which concentrates the effort of agricultural modernisation in areas where agriculture can rapidly reach a high level of production. This modernisation of agriculture must be achieved first of all on the perimeter of the plains. Progress has already been made. It must be encouraged by planned production on the part of the authorities.

In other areas, especially the mountains and the high plateaux, it is likely that the traditional economy will prevail for some time since social structures are relatively stable. Prompt action will allow the population to develop numerous potential activities hitherto ignored (the planting of olive trees, almond trees and fruit-trees, the development of cattle-rearing for milk and meat etc.). A consistent policy, especially with regard to small projects, should gradually transform this economy. Thanks to its new policy, the " Promotion Nationale ", should be less an instrument to combat under-employment than a public service the necessity of which the people would understand.

⁂

The rather unfavourable development of the economy over the last decade and the size of our structural and financial problems do not allow us to say that the Three Year Plan will usher in a period of facile prosperity.

Morocco must work harder and accept sacrifices to make genuine progress possible in the long run.

The State will do averything possible but without the complete backing and the constant effort of every citizen the carrying out of the Plan will remain incomplete and it will not contribute to the basic factors of real development.

OUTLOOK FOR THE PLAN AS A WHOLE AND FINANCING

I. — TABLE OF INVESTMENTS

The table attached shows detailed investment by sector during the three-year period.

The distribution between the years 1965-66-67 is only an indication.

For the public and semi-public sectors the minister in charge of finance will see to the adjustment of credit payments within the limit of overall authorisation and on the basis of the twofold necessity of financial possibilities and the rate of achievement of major projects.

Taking all in all the following summary can be established :

(in thousands of DH)

SECTOR	Public sector	Semi-public sector	Private investment	Total for the Plan
I - AGRICULTURE	851.600	—	indication	851.600
II - TOURISM	134.000	—	90.000	224.000
III - TRAINING	117.744	—	indication	117.744
IV - SUBSTRUCTURE	389.303	—	indication	389.303
V - POWER	120.000	120.001	—	240.001
VI - PRODUCTION .	532.530	352.310	459.638	1.344.478
VII - EDUCATION SOCIAL WORK.	151.910	—	—	151.910
VIII - ADMIN.	124.098	—	indication	124.098
IX - EXCEPTIONAL	40.000	—	indication	40.000
TOTAL	2.461.185	472.311	549.638	3.483.134

II. — INVESTMENT AND PRODUCTION

1° - Investment

The above table should be corrected in order to take into account :

— investments financed by public credit ;

— amortization and renewal of equipment and stock ;

— public operations considered as investments by the national accountancy, especially major repairs and roads ;

— private investments in the agricultural sector, services, transport and commerce ;

— private investment in housing ;

— the payment in kind given under the " Promotion Nationale ".

Thus the overall figure for gross investment for the period amounts to about 6,200 million DH, or about 2000 million yearly average.

This average is definitely higher than investments made over the last few years. Thus in 1963 and 1964 annual investments were about 1400 million DH, or 13 % of gross internal production. Since investments cannot rise precipitously from 1400 million en 1964 to more than 2000 million in 1965, they must increase gradually during the Plan period, so that investments in 1964 might well amount to 2400 million DH. The proportion of investment to gross internal production would then be about 20 %. The fact that the rate of investment (portion of the gross internal production devoted to investment) rises from 13 % in 1963-64 to 20 % in 1967 represents a real change-over, but it is hard to see how it could be otherwise if we really want economic development.

Moreover we must not hope for immediate results.

⁂

RECAPITULATION OF THREE YEAR PLAN INVESTMENTS

(in thousands of DH)

Glossary of terms possibly unfamiliar

« Foncier » = pertaining to land, e.g.

« Conservation foncière » = land conservancy.

« Culture en sec » = dry cultivation.

« Vulgarisation » = spread of knowledge.

« Allotissements » = allotments .

« Elevage » = stock-breeding.

« Pisciculture » = fish-breeding.

« Semences et engrais » = seeds and fertilizer.

« Reboisement » = reafforestation.

« Recherches » = research.

« Anti-acridienne » = anti-locust.

« Formation des Cadres » = training of personnel.

« Enseignement » = teaching.

« Energie » = power.

« Artisanat » = handicrafts.

« Pêches » = fisheries.

« Jeunesse et Sports » : Youth and Sports Dept.

« Habitat » = housing.

« Dépenses » = expenditure.

RECAPITULATION DES INVESTISSEMENTS PREVUS PAR LE PLAN TRIENNAL 1965 - 1967

(En milliers de DH)

	FONDS PUBLICS			Secteur semi-public			Crédit d'origine publique			Investissements privés			Total	Observations
	1965	1966	1967	1965	1966	1967	1965	1966	1967	1965	1966	1967	Fonds Publics Plan	
I. AGRICULTURE														
A. *Hydraulique agricole*														
1) *Intervention de l'ONI*														
Périmètres	128.760	135.450	119.090	—	—	—	33.020	34.840	35.100	non chiffré			383.300	
Etudes particulières	10.580	6.900	6.000	—	—	—	—	—	—				23.480	
Petits périmètres .	1.517	1.467	2.061	—	—	—	—	—	—				5.045	
Petite hydraulique	10.562	13.652	15.771	—	—	—	—	—	—				39.985	
Equip. communaux	4.030	2.930	3.040	—	—	—	—	—	—				10.000	
Total 1)	155.449	160.399	145.962	—	—	—	33.020	34.840	35.100	P.M.	P.M.	P.M.	461.810	
2) *Etudes et travaux fonciers*														
Conservation foncière et service topographique	5.200	5.140	5.800	—	—	—	—	—	—	—	—	—	16.140	
Total 2)	5.200	5.140	5.800	—	—	—	—	—	—	—	—	—	16.140	
TOTAL A	160.649	165.539	151.762	—	—	—	33.020	34.840	35.100	—	—	—	477 950	

B. *Culture en sec.*													
1) *Intervention de l'ONMR*													
Equip. des pépinières	2.000	1.000	1.000	—	—	—				—	—	—	4.000
Matériel agricole .	6.000	4.000	4.000	—	—	—				—	—	—	14.000
Action vulgarisation	1.000	1.500	1.500	—	—	—	5.000	5.000	5.000	—	—	—	4.000
Allotissements	10.350	22.650	17.700	—	—	—	10.400	40.800	33.600	non chiffré			50.700
Elevage (parcours points d'eau...) ..	7.000	9.500	9.950	—	—	—				—	—	—	26.450
Equip. communaux	14.030	9.710	10.160	—	—	—				—	—	—	33.900
Total 1)	40.380	48.360	44.310	—	—	—	15.400	45.800	38.600	P.M.	P.M.	P.M.	133.050
2) *Intervention du Ministère de l'Agriculture*													
Elevage	3.000	5.000	5.000	—	—	—	P.M.	P.M.	P.M.	—	—	—	13.000
Constructions	500	500	642	—	—	—	—	—	—	—	—	—	1.642
Pisciculture	32	33	33	—	—	—	—	—	—	—	—	—	98
Semences et engrais	3.000	3.000	3.000	—	—	—	—	—	—	—	—	—	9.000
Total 2)	6.532	8.533	8.675	—	—	—	—	—	—	—	—	—	23.740
TOTAL B ..	46.912	56.893	52.985	--	—	—	15.400	45.800	38.600	P.M.	P.M.	P.M.	156.790

	Fonds publics			Secteur semi-public			Credit d'origine publique			Investissements privés			Total fonds publics	Observations
	1965	1966	1967	1965	1966	1967	1965	1966	1967	1965	1966	1967	Plan	
C. *Projets agricoles intégrés* (1)														
1) Rif - Derro ..	8.595	12.455	12.420	—	—	—	—	—	—	non chiffré			33.470	(1) Ces prévisions pourront être rectifiées après élaboration de projets spécifiques susceptibles de recevoir une aide extérieure
2) Loukkos	1.700	6.600	14.200	—	—	—	—	—	—				22.500	
3) Tafilalet	3.000	5.000	6.000	—	—	—	—	—	—				14.000	
TOTAL C ...	13.295	24.055	32.620	—	—	—	—	—	—	P.M.	P.M.	P.M.	69.970	
D. *Protection des sols*														
1) D.R.S.	7.000	7.000	8.000	—	—	—	—	—	—	non chiffré			22.000	
2) Reboisement .	10.000	11.000	12.000	—	—	—	—	—	—				33.000	
3) Chemins forestiers	3.400	3.700	3.900	—	—	—	—	—	—				11.000	
4) Maisons forestières	800	1.490	1.610	—	—	—	—	—	—				3.900	
5) Fonds forestiers	—	—	—	—	—	—	—	—	—				—	
TOTAL D ..	21.200	23.190	25.510	—	—	—	—	—	—	P.M.	P.M.	P.M.	69.900	(2) Salaires en nature non compris
E. *Promotion Nationale* (2)	18.000	19.500	23.500	—	—	—	—	—	—	—	—	—	61.000	
TOTAL E. ..	18.000	19.500	23.500	—	—	—	—	—	—	—	—	—	61.000	
F. *Recherche Agronomique*	5.795	5.235	4.960	—	—	—	—	—	—	—	—	—	15.990	(3) Besoins globaux sans tenir compte des remboursements
TOTAL F ..	5.795	5.235	4.960	—	—	—	—	—	—	—	—	—	15.990	
G. *Dépenses exceptionnelles* *Lutte anti-acridienne*	—	—	—	—	—	—	—	—	—	—	—	—		
TOTAL I. AGRICULTURE	265.851	294.412	291.337	—	—	—	48.420 (3)	80.640 (3)	73.700 (3)	P.M.	P.M.	P.M.	851.600	

II. TOURISME													
A. *Infrastructures touristiques*													
1) Equip. préalables et aménagement de sites	12.000	20.000	25.000	—	—	—	—	—	—	—	—	—	57.000	
2) Transports ...	5.000	5.000	—	—	—	—	5.000	7.000	10.000	—	—	—	10.000	
TOTAL A ..	17.000	25.000	25.000	—	—	—	5.000	7.000	10.000	P.M.	P.M.	P.M.	67.000	
B. *Ensembles touristiques*													
1) Construction O.N.M.T.	1.650	—	—	—	—	—	—	—	—	—	—	—	1.650	
2) Autres constructions	10.350	20.000	35.000	—	—	—	30.000 (4)	60.000 (4)	80.000 (4)	15.000	25.000	50.000	65.350	(4) Une partie seulement de ces crédits sera d'origine publique
TOTAL B ..	12.000	20.000	35.000	—	—	—	30.000	60.000	80.000	15.000	25.000	50.000	67.000	
TOTAL II TOURISME	29.000	45.000	60.000	—	—	—	35.000	67.000	90.000	15.000	25.000	50.000	134.000	
III. FORMATION DES CADRES													
A. *Enseignement*													
1) Enseignement secondaire	22.710	24.910	22.880	—	—	—	—	—	—	—	—	—	70.500	
2) Enseignement technique	3.900	4.800	4.200	—	—	—	—	—	—	—	—	—	12.900	
3) Enseignement Supérieur	3.014	2.600	2.350	—	—	—	—	—	—	—	—	—	7.964	
TOTAL A ...	29.624	32.310	29.430	—	—	—	—	—	—	—	—	—	91.364	
(3) dont besoins supplémentaires													
M. et LT	32,4	74,6	77,7											
C.T.	—	44,0	87,5											
Total	32,4	118,6	165,2											

	Fonds publics			Secteur semi-public			Crédits d'origine publique			Investissements privés			Total Fonds publics Plan	Observations
	1965	1966	1967	1965	1966	1967	1965	1966	1967	1965	1966	1967		
B. - *Enseignements spécialisés*														
1° Formation des maîtres et des instituteurs (5)	3.800	625	—	non chiffré		—	—	—	—	—	—	—	4.425	(5) Equipement communal éventuel
2° Enseignement agricole	1.070	5.800	1.600			—	—	—	—	—	—	—	8.470	
3° Formation professionnelle	2.965	2.870	2.450	—	—	—	—	—	—	—	—	—	8.285	
4° Formation hôtelière ..	1.000	1.000	1.000	—	—	—	—	—	—	—	—	—	3.000	
5° Ecole d'administration	—	—	—	—	—	—	—	—	—	—	—	—	--	
6° Ecoles militaires	1.000	700	500	—	—	—	—	—	—	—	—	—	2.200	
Total B	9.835	10.995	5.550	—	—	—	—	—	—	—	—	—	26.380	
TOTAL III - CADRES ..	39.459	43.305	34.980	—	—	—	—	—	—	—	—	—	117.744	
IV. INFRASTRUCTURE														
A. - *Routes et chemins*														
1° Routes principales et secondaires	11.350	12.000	13.000	—	—	—	—	—	—	—	—	—	36.350	
2° Chemins tertiaires ...	13.220	10.000	11.000	—	—	—	—	—	—	—	—	—	34 220	
3° Pistes minières	P.M	P.M	P.M	—	—	—	—	—	—	—	—	—	—	
4° Matériel et études ...	P.M	P.M	P.M	—	—	—	—	—	—	—	—	—	—	
5° Itinéraires touristiques	8.940	7.110	3.380	—	—	—	—	—	—	—	—	—	19.430	
6° Promotion Nationale .	10 000	11.000	11.000	—	—	—	—	—	—	—	—	—	32.000	
Total A	43.510	40.110	38.380	—	—	—	—	—	—	—	—	—	122.000	

B. - *Infrastructures, projets spécifiques*													
1° Complexe de SAFI ..	12.210	15.000	—	—	—	—	—	—	—	—	—	—	27.210
2° Projet agricole Sidi Slimane	5.000	5.000	4.900	—	—	—	—	—	—	—	—	—	14.900
3° Zone industrielle de Tanger	3.000	7.000	7.000	—	—	—	—	—	—	—	—	—	17.000
Total B.	20.210	27.000	11.900	—	—	—	—	—	—	—	—	—	59.110
C. - *Chemins de Fer*	19.689	19.263	16.048	—	—	—	—	—	—	—	—	—	55.000
Total C.	19.689	19.263	16.048	—	—	—	—	—	—	—	—	—	55.000
D. - *Ports*													
1° Tanger	8.700	2.500	—	—	—	—	—	—	—	—	—	—	11.200
2° Casablanca	6.290	6.945	1.730	—	—	—	—	—	—	—	—	—	14.965
3° Autres ports	9.305	8.520	4.210	—	—	—	—	—	—	—	—	—	22.035
Total D.	24.295	17.965	5.940	—	—	—	—	—	—	—	—	—	48.200
E. - *Aéronautique civile* ..	14.035	10.405	6.560	—	—	—	—	—	—	—	—	—	31.000
Total E.	14.035	10.405	6.560	—	—	—	—	—	—	—	—	—	31.000
F. - *Télécommunications* ..	22.040	23.282	12.075	—	—	—	—	—	—	—	—	—	57.397
Total F.	22.040	23.282	12.075	—	—	—	—	—	—	—	—	—	57.397
G. - *Radiodiffusion - Télévision*													
1° Radiodiffusion	3.500	3.500	3.300	—	—	—	—	—	—	—	—	—	10.300
2° Télévision	3.200	1.500	1.596	—	—	—	—	—	—	—	—	—	6.296
Total G.	6.700	5.000	4.896	—	—	—	—	—	—	—	—	—	16.596
TOTAL IV - INFRASTRUCTURES ..	150.479	143.025	95.799	—	—	—	—	—	—	—	—	—	389.303

	Fonds publics			Secteur semi-public			Crédits d'origine publique			Investissements privés			Total Fonds publics Plan	Observations
	1965	1966	1967	1965	1966	1967	1965	1966	1967	1965	1966	1967		
V - ENERGIE	38.471	40.313	41.216	38.471 (6)	40.314 (6)	41.216 (6)	—	—	—	—	—	—	120.000	(6) dont une partie sera recherchée par emprunt
TOTAL V ENERGIE	38.471	40.313	41.216	38.471	40.314	41.216	—	—	—	—	—	—	120.000	
VI - PRODUCTION MINIERE, INDUSTRIELLE, PECHES, MARINE MARCHANDE ARTISANAT														
A. *Production minière*	15.820	14.330	14.500	161.610 (7)	94.100 (7)	96.600 (7)	—	—	—	53.614 (8)	53.117 (8)	39.907 (8)	44.650	(7) Investissements OCP.
Total A	15.820	14.330	14.500	161.610	94.100	96.600	—	—	—	53.614	53.117	39.907	44.650	(8) Fonds privés en association avec le BRPM. Entreprises minières privées
B. *Production Industrielle*	120.000	160.000	205.000	—	—	—	—	—	—	100.000	100.000	113.000	485.000	
Total B.	120.000	160.000	205.000	—	—	—	—	—	—	100.000	100.000	113.000	485.000	
C. *Artisanat*	300	600	800	—	—	—	non chiffré			non	chiffré		1.700	
Total C	300	600	800	—	—	—	P.M.	P.M.	P.M.	P.M.	P.M.	P.M.	1.700	
D. *Pêches et Marine Marchande.*	1.160	10	10	—	—	—	—	—	—	non	chiffré		1.180	
Total D.	1.160	10	10	—	—	—	—	-	—	P.M.	P.M.	P.M.	1.180	
Total VI. - PRODUCTIONS ..	137.280	174.940	220 310	161.610	94.100	96.600	—	—	—	153.614	153.117	152.907	532.530	

VII - ENSEIGNEMENT PRIMAIRE - JEUNESSE ET SPORTS - ACTION SOCIALE														
A. *Enseignement Primaire*	8.000	—	—	(9)	(9)	(9)	—	—	—	—	—	—	8.000	(9) Equipement communal éventuel non chiffré
Total A.	8.000	—	—	P.M.	P.M.	—	—	—	—	—	—	—	8.000	
B. *Jeunesse et Sports*	1.500	1.500	1.800	—	—	—	—	—	—	—	—	—	4.800	
Total B	1.500	1.500	1.800	—	—	—	—	—	—	—	—	—	4.800	
C. *Action Sociale*														
1° *Santé Publique*	25.045	13.146	9.807	—	—	—	—	—	—	—	—	—	47.998	
TOTAL 1°	25.045	13.146	9.807	—	—	—	—	—	—	—	—	—	47.998	
2° *Aménagements Ruraux et Urbains* :														
a) Urbains - Habitat	20.000	15.000	15.000	—	—	—	20.000 (10)	20.000 (10)	20.000 (10)	non chiffré			50.000	(10) la plus grande partie par utilisation des disponibilités de Banques Populaires
b) Habitat - Promotion Nationale	1.500	1.500	1.500	—	—	—	—	—	—	—	—	—	4.500	
c) Aménagements ruraux (12)	9.212	12.400	10.500	non chiffré		—	—	—	—	—	—	—	32.112	
d) Promotion Nationale (11)	1.500	1 500	1.500	—	—	—	—	—	—	—	—	—	4.500	(11) Salaires en nature non compris.
TOTAL 2°	32 212	30.400	28.500	P.M.	P.M.	P.M.	20.000	20.000	20.000	P.M.	P.M.	P.M.	91.112	
TOTAL C	57.257	43.546	38.307	—	—	—	20.000	20.000	20.000	P.M.	P.M.	P.M.	139.110	(12) Equipement communal non compris.
TOTAL VII - ENSEIGNEMENT ACTION SOCIALE	66.757	45.046	40.107	—	—	—	20.000	20.000	20.000	—	—	—	151.910	

	Fonds publics			Secteur semi-public			Crédits d'origine publique			Investissements privés			Total Fonds publics Plan	Observations
	1965	1966	1967	1965	1966	1967	1965	1966	1967	1965	1966	1967		
VIII. - EQUIPEMENT ADMINISTRATIF														
A. *Dépenses civiles*	28.645	28.090	24.558	—	—	—	—	—	—	non	chiffré		81.293	
Total A	28.645	28.090	24.558	—	—	—	—	—	—	P.M.	P.M.	P.M.	81.293	
B. *Dépenses Militaires*	14.200	10.030	18.575	—	—	—	—	—	—	—	—	—	42.805	
Total B	14.200	10.030	18.575	—	—	—	—	—	—	—	—	—	42.805	
TOTAL VIII - ADMINISTRATIF	42.845	38.120	43.133	—	—	—	—	—	—	—	—	—	124.098	
IX. - DEPENSES EXCEPTIONNELLES AGADIR	22.000	8.000	10.000	—	—	—	5.000 (13)	6.000 (13)	6.000 (13)	—	—	—	40.000	(13) Crédit à la reconstruction privée
TOTAL GENERAL.	792.142	832.161	836.882	200.081	134.414	137.816	108.420	173.640	189.700	168.614	178.117	202.907	2.461.185	

2° - Production

In fact the investment of the Plan are largely investments the profitability of which is indirect (substructure) or which will not apoear before a more or less distant date (some agricultural investments, expenditure on education etc.). In such conditions we must expect a relatively modest increase in production. Overall estimates make it probable that this rate might be 3.7 % per year. It may seem small especially in comparison with the aims of the Five Year Plan (6.2 %) but these aims were no doubt too ambitious and the rate of growth estimated for agriculture was not realistic. Moreover, the relatively short term of the Three Year Plan make it impossible to show on our accounts, as from 1968, the results of industrial investment the realisation of which will only occur in 1967.

Owing to this very moderate growth the production pattern will hardly be altered. At the most we may expect a slight increase on the part of industry (15 % of production en 1968 as against 15 % in 1964).

To sum up, although the investment effort provided for by the Plan appears considerable, we cannot expect a noticeable increase in production between now and 1968. We now realise that it was impossible to set an objective, as regards private consumption, other than the maintenance of the present standard of living (incidentally the Five Year Plan only provided for an increase of 0.4 % per year).

Is true that Moroccanisation will permit a certain improvement in some sectors, but it is only after 1968 that we can look for a continuous rise in the standard of living based on a gradually increase in available consumer goods. It is only after the Three Year Plan that investment in agriculture and even in industry will have its maximum repercussion on production in this country.

The table below, which links resources with employment of goods and services available, indicates the evolution of the main factors of the economy from 1964 to 1968.

Resources available in Morocco

(in tens of thousands of DH)

	UTILISATION					Total	RESOURCES	
	Private consumption	State consumption	Consumption by foreigners (1)	Investment	Variation of stocks		Gross internal production	Deficit
1964 (2) ..	9.150	460	350	1.420	—	11.380	10.790	590
1968	10.300	390	570	2.600	20	13.880	12.500	1.380
Variation.	1.150	—70	220	1.180	20	2.500	1.710	790
INDICES								
1964	100	100	100	100	—	100	100	100
1968	113	85	163	183	—	122	116	234

We may observe :

— the considerable increase in investment (index 183) and the fact that private consumption increases at a slower rate than production (113 against 116) ;

— the reduction of State consumption linked with the disappearance of the deficit for the working budget ;

— the considerable increase in receipts from tourism.

The column "deficit" (with overseas) is obtained by showing the difference. The increase of this deficit will continue to be a problem for the financing of the Plan.

---

(1) Foreign administration and tourists.

(2) Only provisional.

3° - OVERALL FINANCING

Although the problem of financing the budget, both working and equipment budgets, is evident from a study of the expenditure provided for and receipts known at the present time, we should not lose sight of the fact that this is only one aspect of a much larger problem, that of financing the whole of the national economy.

The following table shows, in terms of overall financing, the results of the preceding table. The necessary amount of external aid is calculated by adding to the deficit on goods and services other current operations connected with the balance of payments (essentially revenue on capital, work and gifts). Local savings required are obtained from the difference between the investments and external aid.

Forecasts of financing for the Three Year Plan

(annual average in millions of DH)

UTILISATION		RESOURCES	
Gross investment ..	2.090	Local savings ...... Net external aid ...	1.570 520
Total utilisation	2.090	Total resources	2.090

Two conclusions may be drawn from this table :

a) **The necessary local** savings are higher than the amount of savings which normally occur. Thus from 1962 to 1964 average annual saving was only 1120 million DH. Moreover, and this is more important, the rate of savings (savings/production) is considerably higher since it goes from 11 % (average 1962-63-64) to 14 % for the period 1965-68. It is obvious that a change like this cannot take place on its own and that consumption will naturally follow an increased rate of production. Various measures can be suggested to get at this extra saving : a fiscal policy aimed at limiting useless or luxury expenditure, measures for encouraging the constitution of reserves in businesses, encouragement of individual savings, restrictions on credit and consumption etc.

b) Net external aid is definitely higher than aid received by Morocco over the last three or four years. If we take into account amortization and certain operations classed as capital expenditure, the gross increase of capital can be fixed at an annual average of 710 million DH (1) whereas in 1963 gross aid received was only 230 million. The forecasts for financing the equipment budget show an annual average of 530 million. Although definitely higher than loans normally received, this aid would remain insufficient if the difference of 180 million DH (1) per year with requirements of 710 million did not represent private external investments or extra public aid.

If these external resources cannot be obtained, any adjustment is bound to affect adversely :

- either investments
- or private consumption, the extra effort being called for from local savings.

III. — FINANCING THE PLAN.

During the three-year period the State must :

- Finance directly investments in the public sector, i.e. 2461 million DH.
- Finance indirectly credit requirements estimated at 471 million DH, part of which only, not shown in figures, corresponds to a search for new available cash.
- Finance indirectly investments in the hands of the public sector.

The financing of the Plan cannot therefore be dissociated from financing all the charges on the nation both internally and externally.

Internally it was inconceivable to continue with an annual overall deficit approximating to that foreseen by the Finance Law for 1964, i.e. 780 million DH.

---

(1) These are not accountancy figures but in order of size.

The draft finance law for 1965 shows the Government's real desire to pursue a policy of genuine austerity which represents a decisive reversal of the tendency since independance, since ordinary definite resources not only balance permanent charges but even allow a surplus of about 60 million automatically earmarked to cover investment charges by the action of the new appearance of the finance law resulting from organic dispositions.

The level of public investment provided for should not therefore lead to our having recourse to monetary measures as important as those adopted since 1961.

Externally a summary calculation shows that about 36 % of expenditure on equipment in the public sector represents a direct drain on foreign currency. For the three-year period the balance of payments should therefore support expenditure in currency over 1000 million DH.

In order not to ruin the frail balance existing at the moment, it is essential to seek financial aid amounting to a minimum on annual average of 340 million DH.

At this stage we may add the increase in capital rendered necessary by insufficient internal savings, resulting from insufficient production which does not leave much in the way of assets after consumption has been taken off.

It is in such a difficult financial situation, marked by a rise in internal prices and a threatened balance of payments, that we must seek means which will allow us, without inflation, to finance the equipment plan on which our development and well-being depend.

1°) External aid

The scarcity of available national resources is an obstacle to a development happily balanced by the formula of bilateral and multilateral co-operation in the international field, which Morocco has not so far been able to use with proper dynamism.

⁂

It is possible to hope, during the three-year period, for about 500 million DH in specific aid, including gifts in cash or in kind, long-term loans already earmarked for development projects (IBRD loan for Sidi Slimane, A.I.D. loan for the Basse Moulouya) and loans tied to supplier credit (medium term).

But it must be emphasised that the amount indicated will not be reached unless, as an indispensable condition, the problem of financing the Safi complex is solved in 1965.

Until now the State has financed all the requirements of the complex either directly or by budgetary subsidy. This financing has been a heavy burden on the Treasury as well as on the balance of payments.

The simple and healthy formula by which recourse is had to registered capital and long-term borrowing should, while safeguarding the interest of the State in this industrial affair, ensure a substantial flow of foreign currency, budgetary receipts by partial reimbursement of sums already encashed and the ability to cover expenditure still to be settled in 1965 and possibly in 1966.

⁂

To these operations, called "specific" since they are tightly bound up with definite projects, must be added resources coming from overall external loans, the earmarking of which is usually less precise.

The range of possibilities in this field is considerable, even when it is explored with the twofold intention of preserving Morocco's economic independence and her political aspirations.

American, European and Arab nations more favoured than ourselves are prepared to grant aid which will allow the economy of Morocco to realise investments needed for her development.

In this connection it is perhaps not unreasonable to count, for the three-year period, on aid amounting all in all to about 1020 million DH, on good terms, both from the point of duration and the rate of interest.

⁂

Really external aid already certain or easily foreseen should amount to about 1525 million DH for the three-year period (including the possibility of re-financing the Safi complex).

The State must therefore finance the necessary complement for the public sector, i.e. 900 million DH approximately.

2°) Internal financing

The desire to clear up the public situation, strongly affirmed by the surplus of ordinary resources shown in the finance law of 1965, will lead to public self-financing prudently estimated at 300 million DH, the Government intending to maintain and reinforce restrictive measures regarding expenditure.

The possibility of long-term internal borrowing intended to mobilise available savings has been estimated at 40 million DH per year ot 120 million for the three-year period.

The remainder of about 516 million will be taken in charge by the Treasury. The amount does not seem sufficient to constitute a real threat to the currency.

In fact, even if we integrate the charges of the Treasury special accounts, recourse to the Treasury will be less than 300 million DH a year. This appears to remain within the limits of what we can ask from the money markey without unleashing inflationary tendencies.

In the last analysis the balance of charges and resources for the three-year period can be established as follows :

(in millions of DH).

ITEM	Resources	Charges	Proportion
Public investments	—	2.461	
External resources :			
— Specific projects	505	—	20 %
— Overall financing	1.020	—	42 %
— Internal borrowing	120	—	5 %
— Public self-financing	300	—	21 %
Total	2.461	2.461	100 %

3°) Financing of additional projects.

The prudence motivated by the experience of the Five Year Plan, both as regards fixing objectives and determining the means of financing, does not exclude the possibility of launching additional operations provided that financing is arranged in advance.

In other words there are definite development projects which are not included under the permits already provided for, with the exception of surveys and research and which are likely to assist our economic and social progress provided that they are financed in such a way that they are not a burden on the Treasury either internally or in foreign currency.

These projects were studied during the preliminary surveys for the establishment of the Three Year Plan. The validity, the necessity and the urgency of the projects are admitted. But the rigorous financial control which determines, and must determine, our choice of action has not allowed us to consider them in the first phase among authorised investment projects coming withing the overall financing of the Plan.

Nevertheless the chances of launching this additional programme would appear favourable in so far as the projects conform to certain criteria demanded in the case of bilateral and international aid. These criteria are based on :

— Technical justification ;

— Economic validity ;

— Financial aspects of the project and especially the amount of financing in foreign currency required.

There is therefore no doubt that the Three Year Plan may be enlarged to take into consideration specific additional projects provided that their financing can be negotiated and obtained.

We must admit that on this condition the operations listed below will be authorised as soon as the Ministry of Economy and Finance is able to find a means of financing them.

I. — MINISTRY OF PUBLIC WORKS

Extension of Casablanca port (phosphates jetty, dredging etc.)	
— Estimate	55,000,000 DH
Outer harbour at Mohammedia	
— for 40,000 ton tankers	40,000,000 —
Economic housing scheme	
— Construction of 4453 dwellings for rent/sale	56,500,000 —
Total Public Works	151,500,000 DH

II. — THE RAILWAYS (ONCF)

— **Electrification line Benguerir-Safi**	14,000,000 —
— **Purchase of 20 passenger coaches**	20,000,000 —
Total railways	34,000,000 DH

III. — MINING RESEARCH AND INVESTMENT OFFICE (BRPM).

— **Lead-zinc foundry**	80,000,000 —
— **Moulouya lead deposits**	16,000,000 —
(cost of research and work to be deducted)	
— **Bou-Madine deposits**	9,000,000 —
(deduction as above)	
— **Fluorine deposits at El Hamman**	6,000,000 —
— **Potassium deposits at Khemisset**	18,000,000 —
(deduction as above)	
Total BRPM	129,000,000 DH

IV. — INDUSTRIAL PROJECTS (BEPI)

— **Iron and steel project**	85,000,000 —
— **Pyrrhotine cinders**	18,000,000 —
Ammonia, naphtha, bitumen	40,000,000 —
— **Refuelling station at Tangier** (to be worked out)	as an indication
— **Safi Complex - Sodium/chlorine/PVC**	48,000,000 —
— **Alfa pulp**	45,000,000 —
— **Textile industry**	89,000,000 —
Total for industry	325,000,000 DH

Note : provision has been made in the Plan under the heading "State Participation" - Chapter VI - "Production".

V. — NATIONAL IRRIGATION OFFICE (ONI)

— **Tafilalet project,** including the Ziz dam to be completed in about fifteen years	200,000,000 DH
— **Loukos project, improvement of 28,500 hectares** in about fifteen years	270,000,000 —
Improvements of the Tessaout upstream from the Aït Adel dam (electric production excluded)	300,000,000 —
Improvement of the Beni Moussa area, 300,000 hectares	117,500,000 —
— Doukkala canal for irrigation and improvement	104,000,000 —
Total ONI	991,500,000 DH

VI. — RURAL MODERNISATION OFFICE (ONMR)

Derro project — (partially in process of construction)	125,300,000 —
GRAND TOTAL	1,726,300,000 DH

Obviously such a vast programme, however well justified, cannot be authorised on an overall basis but project by project :

- On the basis of the progress of surveys and examination of the technical data, economics and financing.
- In accordance with an external aid agreement allowing for financing.

We should note nevertheless that in most cases the realisation of these projects will go far beyond the three-year period, often fifteen years.

We will only mention as an indication the projects connected with a survey of the Sebou valley which are being carried out by the FAO and the UN Special Fund.

4°) Problems connected with financing the credit

The need for credit arising from the application of the Plan for the part coming under the public sector has been estimated at about 471 million DH (overall requirements, deduction of repayment of current loans).

Most of the demand comes at agricultural sector level, tourism and building, that is to say by way of establishments depending in some degree on the State :

- Caisse Nationale de Crédit Agricole ;
- Caisse de Prêts Immobiliers du Maroc ;
- Banque Centrale Populaire.

Industrial credit should be able to obtain financing within the possibilities provided by the banking sector and the BNDE (Economic Development Bank) which is able to finance projects in foreign currency as regards imported productive equipment.

Hotel credit problem a twofold problem, technical and financial.

The technical problem can be solved by the proposed modification of current legislation whereby the present mortgage system would be more flexible and procedure based at the same time on property and immovable assets.

Approved land credit companies, especially the Caisse de Prêts Immobiliers du Maroc, will have the right to issue obligations entitled "land bonds" which will make it possible to mobilise available cash on the financial market.

Finally, negotiations are about to be concluded w[illegible]ill enable the BNDE to grant loans to finance the import of pro[illegible] equipment essential to the hotel business and which cannot b[illegible] in Morocco.

As a whole, land credit and equipment credit should be tempting enough to interest private entreprise.

Financing of agricultural credit raises even more awkward problems for the Caisse Nationale de Crédit Agricole taking into account the demands not only of the Three Year Plan but also of the overall activity in this sector.

The necessary resources will be sought as follows:

— By the most efficient recovery of loans previously granted

— By mobilising deposits constituted by savings which people are reluctant to invest directly, with the help and the support of the banking sector.

But this second possibility runs the risk of not obtaining sufficient funds in the face of direct competition from the Treasury and the industrial and commercial sectors on the money and finance market.

It is therefore indispensable to look for additional means bearing in mind the overwhelming importance of agricultural production .

Such means might be provided by the outcome of negotiations entered upon by the Caisse Nationale with the agreement and support of the Government.

In the international field a long-term of 50 million DH has been requested which permit the financing of medium-term and long-term requirements for agricultural work and to create, in part, a real "revolving credit".

As regards bilateral agreements great hopes are held out by an analogous system which would mobilise funds in dirhams to be earmarked for the agricultural sector.

A combination of all these methods, provided that negotiations are actively pursued as regards external loans, should enable us to meet our requirements.

⁂

There is no doubt that the financing of all investment expenditure over the period is a serious problem since, although it seems certain that we can cover our direct budgetary expenditure, it is obvious that the whole of intended investment cannot be achieved without the confident participation of the national and foreign private sector and unless each citizen realises that savings and sacrifices today are a necessary basis for prosperity to-morrow.

MINISTRY OF AGRICULTURE

THREE YEAR PLAN 1965-67

Chapter I. – Basic information

Chapter II. – Programme

Chapter III. – Implementation of the investment plan

CHAPTER I

BASIC INFORMATION

I. – The problems of agriculture

II. – The lessons of the 1960-65 Five Year Plan

III. – The handicaps of the new Three Year Plan

AGRICULTURAL PROBLEMS

I. — The importance of agriculture in Moroccan economy has been so often pointed out, studied and calculated that only the following tables are required to explain the situation.

— The proportion of agricultural production to the gross internal product :

Table I

(thousands of dirhams)

	1960	1961	1962
G I P	8.200	7.830	8.700
Agriculture	2.650	2.265	2.800

Table 2 show the amount represented by the various items.

	1959-1960	1960-1961	1961-1962
Cereals and leguminous piants	1.015	540	1.150
Tree-growing and market-gardening (industrial)	741	754	825
Stock-farming	1.119	1.119	1.015
Forestry and fishing	159	152	160
Total	3.034	2.565	3.150
Purchases	384	310	350
G I P Agriculture	2.650	2.265	2.800

Table 3 shows the proportion of this production exported.

	1959-1960	1960-1961	1961-1962
Production	3.034	2.565	2.800
Exported in raw state	617	532	686
%	20	21	24
Processed goods	781	707	941
%	26	27	33

Apart from these figures it must be borne in mind that 70 % of the population takes part in agricultural production which, according to the year or climatic condition, represents 35-40 % of the gross internal product, certainly an important slice of the country's economy but which is not essential except in so far as three out of every four inhabitants actually live off it.

We must also distinguish between the two sectors of Moroccan agriculture which exist side by side :

— That which we call "modern" owing to the methods it employs and the corresponding productivity. This sector was originally the exclusive preserve of foreign farmers, but an increasing number of Moroccan nationals have adopted and assimilated modern techniques, either by applying them to their own land or by taking over under the same conditions land which has been returned to Moroccans.

— That which remains "traditional" because it employs ancestral methods essentially based on the use of the swing-plough drawn by two beasts.

Nevertheless this sector is not homogeneous. On the one hand we have medium or big landowners possessing land which can justify large-scale working and, on the other hand, a multitude of smallholders (from one to four hectares at the most) or those associated in working very small areas coming each year from different owners.

Such small farmers are hardly farmers at all. The whole problem of Moroccan agriculture lies in the fact that, on the brink of the 1965-67 Three Year Plan, these people are by for the most numerous category (85 %).

How can we modernise farming methods when nearly 85 % of the farmers do not possess the minimum area of land enabling them to drive a plough ? How can we interest, when it comes to modernisation, men for whom agricultural production is in the last resort an accessory and not the essential resource from which he makes a living ?

The present investment programme will attempt to answer these two major questions by emphasising the conditions necessary for the creation, more or less from scratch, of an agriculture carried on by Moroccan nationals which will automatically include a rational system of working. This is the whole allotment policy, whether it is concerned which recovery of land worked by foreigners or the improvment of land at present inefficiently worked.

This policy leads also to the application, for a certain maximum period and for the benefit of this priviliged sector, of methods of intervention and technical assistance which must be very complete and capable of ensuring the ultimate success of the sector.

Obviously Moroccan agriculture is a vast area, both diverse and complex, with a heavy burden of problems and responsibilities. The decision to set aside for agriculture a considerable proportion of State investment throughout the duration of the Three Year Plan shows the importance which the Government attaches to it in relation to the whole of its activities which affect the economic development of the kingdom.

It is intended to diversify these operations as follows :

- In mountainous areas steps will be taken against erosion, and attention will be paid to reafforestation, organisation of pastures and stock-breeding.
- In the plains the most important problems are dry cultivation and, again, stock-breeding.
- In the pre-Saharan areas particular attention must be paid to hydraulics.
- In irrigated areas works already undertaken must be completed and areas recently watered must be improved.

⁂

2. — The Five Year Plan had contemplated, as far as agriculture is concerned, a volume of investments which have been to a great extent carried out, thus :

Table 4 (thousands of dirhams)

	Estimate 5-Year Plan 1960/1964	Credits 1960/1962	Credits 1963	Credits 1964	Total credits 1960/1964	Un-foreseen
Total for agriculture..	788.210	403.034	246.566	212.539	864.239	76.029
Hydraulics ..	362.710	230.020	147.760	122.900	500.680	137.970
Dry cultivation	97.760	75.994	59.882	51.230	187.106	89.346
Reafforestation	80.900	56.590	30.600	27.100	114.290	23.390

N.B. 1. — A large part of the increase under hydraulics and dry cultivation is due to the O.N.I. and O.N.M.R. having taken up the credits for stock-breeding and tree-growing under the heading "Ministry of Agriculture".

N.B. 2. — The increase under reafforestation comes from the contribution by the "Promotion Nationale".

However, this effort has not enabled the increase in production, which was estimated at 3.5 % this year, to be realised.

In fact the ambitions of the Five Year Plan were difficult to satisfy in such a short time, especially as the necessary financing was underestimated. It was particularly unrealistic to hope to reverse the downward curve of investment which continued from 1954 to 1960 and also to base economic development on an increase of 13-20 % in the gross national product from private savings or on a rapid increase in industrialisation.

Moreover it would appear that at the time we also underestimated the rising birthrate — which is now reaching and passing the exceptionally high figure of 3 % — as well as the problems connected with the structure of society and land-holding, the lack of trained staff etc.

Finally the 1961-62 was disastrous for crops and live-stock.

We have to take these handicaps into account in judging the positive aspects of the achievements of the Five Year Plan.

The creation in 1960 of the National Irrigation Office (ONI) and its five big perimeters went according to plan. The progress of work on the Mechra-Klila dam, the introduction of beet cultivation and the creation of a sugar refinery now in operation, the taking over of the Beni-Amir and Beni Moussa areas at the perimeter concerned for the development of cotton production, all these are factors affecting the agricultural potential of the country.

The creation by the ONI of study groups in the Haouz, Loukkos, Tafilalet and Sebou areas (working in the latter case with the FAO) will help to bring good technical results.

The launching of the "Promotion Nationale" in 1961 enabled us to tackle rural under-employment and soil damage from an entirely fresh view-point and by action which is technically modest, financially inexacting and affecting the most under-privileged among the population.

By using each year 15 million working-days the Water and Forestry Department has been able to double its reafforestation etc. and semi-waterless areas have been able to resume their work on small hydraulic projects.

Doubtless not all projects could be carried out, although the Agricultural Work Centre (CTA) has been transformed into the National Office of Rural Modernisation (ONMR) and its scope extended to the whole of the country, Operation Ploughing, for example, has not brought the development hoped for. Problems of stock-breeding have not been entirely solved and agricultural improvement has not always been successful in irrigated areas.

Despite the creation of a National Agricultural Credit Bank (CNCA) the distribution of credit, financing and operation in the agricultural sector still raise serious problems.

The positive lesson of the Five Year Plan shows that the State, at least for the time being, must give the necessary stimulus and intervene at all stages — production, marketing and credit — even if it is necessary to take one stage at a time.

3. — As we approach the Three Year Plan we must bear in mind that, as in the case of the last Plan, the main agricultural aims must be as follows, in order of importance :

— Satisfaction of the national requirements of basic foodstuffs taking into account the undeniable fact that in many sectors Morocco is deficient, or likely to be, in cereals, meat and dairy produce, where deliveries are at a standstill whereas demand is rising steadily as a result of the rising birthrate.

Table 5. - Average production and consumption from 1964 to 1967 in thousands of tons.

	1964			1967		
	Home requirements	Local production	Deficit	Home requirements	Local production	Deficit
Cereals	3.400	3.300	100	3.580	3.350	230
Meat	170	180	— *	205	195	10

— The main supplies to local industries of local agricultural raw materials consist of: beet, cotton and oilseeds.

---

* Meat production has been more or less stationary for many years. The balance between consumption and production is maintained by an increase in the price of meat (about 70 % compared with 1959).

Table 6. - Average production for the above period of other products:

(in millions of dirhams)

	1964			1967		
	Home requirements	Local production	Deficit	Home requirements	Local production	Deficit
Refined sugar	365	20	— 345	410	70	— 340 *
Crude vegetable oil....	55 (2)	7	— 48	62	14 (3)	— 48
Cotton :						
a) Long-staple fibre.	—	6	+ 6	—	12	+ 12
b) Fibre, yarn, cloth.	16 (4)	—	— 16	—	17	— 17

After the experience of the Five Year Plan the aims of our agricultural policy and the difficulties to be faced remain so vast that we must consider a new priority to be given to our activity. There are several considerations, viz.

First of all, the rigidity of traditional structures and their failure to adapt themselves to rapid evolution is a serious problem. This system forms a coherent whole where each factor is the result of another. Mutual adaptation of all the complex traditional factors means that there is resistance to the slightest innovation.

All this means that allotments will be succesful during the Three Year period in so far as continuity of management immediately after recovery of the land and redistribution among the best farmers has been achieved. This implies a choice to be made among the latter and a numerically sufficient trained staff.

Apart from the essential problem of the pattern of land-holding there are several questions related to improvement of land affected by irrigation and restoration in mountainous regions, also the appreciation of equipment provided by the State.

---

* 350,000 tons must be considered as necessary for full operation of existing refineries on the basis of raw imported sugar.

Secondly we must consider the deficiencies which may affect the carrying out of the Three Year Plan, that is to say :

- — Quantitive lack of trained staff, which will become more serious if something drastic is not done.
- — Lack of funds which the CNCA can place at the disposal of farmers.
- — Lack of choice between a policy of equipment strictly speaking and averall improvement an which the departments have divergent views.
- — Lack of certain preliminary studies.

1°) Personnel

Table 7. - Personnel requirements

	Available 1964	Required at outset of Plan	Required at end of Plan
— Grade 7 or higher (including)	1.250	1.700	1.900
Engineers	820	1.200	1.400
Foreigners	285		

The estimates of requirements have been made on the basis of development from existing structures, that is to say by contemplating assistance from the central departments, the external departments occupying a secondary position. The quality of personnel has been estimated approximately.

The deficiency is nevertheless a real one — both in quality, since many of Grade 7 personnel are in fact of inferior standing — and quantity, since contact staff, both in ONI and ONMR areas seldom amount to a minimum of one technician per fifty lots.

It must also be remembered that optimum use of personnel can only take place if it fits into the structure of peasant life. In this connection the creation of two Departments is such an innovation that probably many questions will have to start again from scratch.

Some departments have palliated this situation by seconding personnel in the case of general surveys etc., from semi-official organisations. The advantage of this is that personnel are only seconded for the period when they will be useful, but at the same time it greatly increases the cost of their employment. This handicap has already been realised by the Finance Ministry which has prohibited its application since 1963, since the appearance of this item under investments can only falsify the accounts.

It remains to decide if such secondment should be absolutely prohibited during the period of the coming Plan — above the number of about a hundred persons serving until the end of 1964 — or whether a deflationary time-able should be imposed in order to prevent all new appointments — except for temporary consultants — and to arrive at complete prohibition at the end of 1963.

In any case the use of seconded personnel is only valid for technical surveys and cannot apply to improvement operations which very soon come to have a political nature and would be outside the scope of persons not closely subordinated to the Government.

⁂

2°) The outlook for agricultural credit

Table 8 (in millions of dirhams)

		CAMPAGNES				
		1962	1963	Estimations		
		1963	1964	1965	1966	1967
— *Besoins* exprimés en matière de crédits						
Moyen et long terme	Pr	6,6	10,8	20,0	30,0	40,0 (1)
	Pu	0,7	4,3	48,4	80,6	73,7
	Total	7,3	15,1	68,4	110,6	113,7
Court terme	Pr	11,0	10,3	15,0	20,0	25,0 (1)
	Pu	29,5	47,4	72,4	145	186
	Total	40,5	57,7	87,4	165	211
— *Possibilités* offertes :						
Moyen et long terme	(CNCA)	7,3	15,1	36,0	36,0	36,0 (2)
Court terme	(CNCA)	78,3	75,6	110,0		
	SOCAP	3,3	5,5	8,5		
	Total	81,6	81,1	118,5	121,0	123,5 (2)
— *Besoins* non-couverts supplémentaires (3)						
Moyen et long terme				32,4	74.6	77,7
Court terme					44	87,5
	Total			32,4	118,5	165,2

(1) En fonction des allotissements.

(2) Sans relèvement du plafond de réescompte de l'Institut d'Emission actuellement fixé à 50,0 millions de dirhams.

(3) Sur la base de recouvrements normaux de la Caisse de Crédit Agricole.

Pr Crédit demandé directement par les Agriculteurs.

Pu Crédit demandé par l'intermédiaire des Offices.

GLOSSARY

CAMPAGNES = seasons

Besoins = requirements

Moyen, court, long term = medium, short and long term.

The CNCA, created in 1962 by the amalgamation of previously existing credit organisations in 1962, aids individuals or farmers connected with the Agricultural Improvement Departments by links which the latter guarantee.

This guarantee is realised by certain operations, generally speaking repayable over thirty years and distinct from credit operations in the strict sense, but it is doubtful whether they can really be recovered and in fact they can be regarded as subsidies.

The credit problem thus depends on a precise determination of the equipment to be provided, either on land already coming under the irrigation system or in favour of holders or "dry cultivation" land, or again on allotments provided for the Plan period.

The huge increase in the requirements of the Departments in allotting land poses the problem of finding new resources for a fund which must be fed by the State alone. It must also be borne in mind that the credits to be furnished during the Plan period will be such that the actual rate of reimbursement (05 %) on loans already granted can no longer be considered.

3°) Choice between equipment and improvement

This choice has hitherto deeply affected the most important department, the Irrigation Office. Comparison of the external and internal equipment already achieved and the deficit in respect of internal equipment poses a problem which is not always well understood.

Table 9 - Equipment achieved under the ONI (allotments not included)

	External equipment			Internal equipment *		
	Achieved	Provided for under the Plan	Total at end of Plan	Achieved	Provided for under the Plan	Total at end of Plan
All irrigation perimeters	127	24,5	151,5	5	26,2	31,2

Land improvment is not merely a question of more acreage but also that of whether the beneficiaries will see to it that the expenditure incurred by the Departments will not be neutralised by failure to clear the land or level it. This is in fact a huge problem.

---

* Achieved rationally and finally : 80/90,000 hectares, however, are now receiving " end of the field " irrigation.

4°) Lack of sufficient preliminary surveys

Even if all the conditions mentioned above were assured, it would still not be possible to set a limit to the handicaps to agricultural objectives.

The fundamental studies undertaken by the Agronomic Research Institute in fact leave much to be desired. It is only at the end of the Plan period in 1967 that we may hope for adequate data.

Specific regional studies undertaken by various national or international organisations are only now beginning to bear fruit.

This is true of the specific regional surveys carried out in the Loukkos and Tafilalet areas. Others are still on the way.

The pattern of the Plan is therefore only an indication and is based on theory illustrated by certain experiments rather than on projects the profitability of which has already been proved.

There are therefore certain risks to be run and we must regard the 1965-1967 objectives with caution. No doubt the investment programme in the public sector is based on a more or less nature doctrine but the extent of achievement must be modified not only by financial potential but by the lessons learn from the relative success or failure of initial operations.

CHAPTER II

THE PROGRAMME

1. — General conditions for effective State intervention.

2. — Content of the 1965-67 Three Year Plan.

    21. — Extension of modern agriculture.

        211. — Irrigated areas.

        212. — Dry cultivation.

    22. — Working of land permitting the application of modern methods.

    23. — Transformation of land based for a long time on traditional methods.

        231. — Irrigated areas.

        232. — Dry areas.

    24. — Agronomic research.

3. — Conclusions and proposals for distribution of public investment and credit in the agricultural sector.

1° — CONDITIONS FOR STATE INTERVENTION

A comparison of the volume of investments by the State over the last three years shows a definite increase in the value devoted to agriculture :

Index	100	1962
	166	1963
	143	1964

The forecasts for the Three Year Plan underline this pattern :

Index	191	1965
	202	1966
	200	1967

Although the importance of agriculture has never been contested, this increase poses much greater problems than the mere assurance of the financial potential.

In fact, as regards the Three Year Plan, it is not enough to catalogue a certain number of operations and to carry them out as optimistically as possible, but to realise that, within the restrictions imposed on State intervention a definite priority must be established.

A good method is to decide, on the basis of lessons learnt in the past, what State-aided operations have in fact paid off, and why.

In this connection we may refer to the success of the Sidi Slimane sugar-beet project, in so far as not only was the original object achieved but there was a change of attitude among the farmers, who were at first distrustful but later demanded further "cultivation contracts" in excess of those which could be granted to them.

This, as well as lesser operations, was achieved because the producer, thanks to information reaching him usually through the traditional channels, felt himself to be in direct contact with the authorities, because the latter kept their promises, because there was a contractual link between him and the State and because he stood to lose nothing over the arrangement.

Possibly it would be a mistake to carry such an analysis too far, that is to say as regards all agricultural production in the country. It will nevertheless serve as a guide to a new conception of State investment in agriculture.

First of all there must obviously be a single authority to orientate production, which must of course be in charge of Government policy as regards this question, i.e. the Ministry of Agriculture, whatever subsidiary organisations are used to deal with producers.

The stimulus must come above all from provincial governors, who are in a sense overseers of agricultural development and who have beside them highly disciplined experts. Everyone from the authorities down to the farmers themselves must be mobilised.

In order to improve land in some areas (such as the Chaouia and the part of the Gharb not subject to flooding) elaborate works are note always necessary. Farming can be modernised without systematic clearance etc. On the other hand the State must provide the services the farmer requires.

The farmer must be, as regards his relations with the State, a man who knows what the wants and has the will to act. Persuasion rather than force is needed. Where enforcement is necessary it can be preceded by a warning order allowing for a certain amount of persuasion.

The limit to State investment can be set by this method. The more the State regulates cultivation and working methods the more it can economise on internal arrangement of land. Intervention of this kind does not necessarily guarantee success, for where the State takes a certain responsibility the farmer feels himself less responsible himself. If, for example, the State plants olive-trees, the farmer will imagine that their growth is not solely up to him and he will blame the State for any difficulties he encounters.

At the same time the State knows that it has not carried out its obligations by giving a piece of land to a landless peasant or giving water to one who does not have it. There is more to do than that.

2° — CONTENT OF THE 1965-67 PROGRAMME

In consideration of the foregoing it is clearly necessary to:

a) Concentrate public investments in the most profitable sectors
— by extending modern methods of cultivation ;
— by organising working methods in areas modernised ;

b) Prepare the transformation of areas farmed according to traditional methods.

Priority action concerns the improvement of irrigated land and new thinking as regards dry cultivation. The essential object is to satisfy local requirements for cereals and sugar.

The traditional sector requires above all soil protection, small hydraulic projects and equipment for communities according to their own requests and their own participation in the work.

21. — Extension of modern methods

211. — Irrigated land

Table 9 shows, as regards irrigated land, the discrepancy between equipment already provided and reasonable satisfaction of the farmers need for water. It is well known that the proportion is 1 : 25.

Requests for investment on the part of the ONI show a pattern different from that which has been to date. In the first place there will henceforth be no external equipment without corresponding internal equipment and, apart from that, initial work must take place down the line from equipment operations : i.e. the settlement of land-holding questions, availability of the population ready for new techniques, preliminary surveys etc.

Table 10. — Action in ONI areas (in thousands of hectares)

AREA	Areas coming under the Plan					
	External equipment		Internal equipment			
	Irrigated		Dry		Irrigated	
	(1)	(2)	(1)	(2)	(1)	(2)
1 - Basse Moulouya	6	—	—	—	8,2	—
2 - Gharb	3	5,7	5	23,3	3,5	5,7
3 - Abda-Doukkala	5	4,0	—	6,5	5	4,0
4 - Haouz	0,5	1,0	—	13,0	0,5	1,0
5 - Tadla	10	4,0	—	—	9	4,0
Total by type of action	24,5	14,7	5	42,8	26,2	14,7
General total	39,2		47,8		40,9	

(1) Direct action.
(2) Allotments.

Taking into account the handicaps already mentioned, this action will take place, according to priority, in the following areas :

Basse-Moulouya - right bank ;

Gharb ;

Doukkala ;

Tadla ;

Operations contemplated in the areas Basse Moulouya (left bank) for 3000 hectares - Haouz - must await a settlement of landholding problems in those regions.

The cost of operations in large areas will be fixed as follows (see Table 11 below).

Table 11. — Cost of different items for the ONI.

In thousands of dirhams).

AREA	SUR-VEYS (1)	EQUIPEMENTS				MEANS	C.M.V.	TOTAL by area	Number of hectares fully equipped
		External		Internal (3)	Econo-mic				
		Large works (2)	Net-works						
P1 - Basse Moulouya	2.650	57,100	12.330	21.800		1.000	12.100	106.980	8.200
P2 - Gharb	5.650	13.400	19.000	58.509		2.000	24.000	122.559	37.500
P3 - Doukkala ..	2.900	12.180	19.600	31.805	150	2.500	9.700	8.835	15.500
P4 - Haouz	2.450	30.000	11.100	21.680	150	700	9.000	75.080	14.500
P5 - Tadla	750	10.000	26.620	34.536	800	2.500	16.000	91.306	13.000
Outside areas ...	6.000							6.000	
Areas that cannot be regionalised	5.500							5.500	
Total	25.900	122.780	88.650	168.330	1.100	8.700	70.800	486.260	88.700

It will be seen that the priority for these operations is established according to specific financing :

— Gharb : 68,700,000 DH of an overall cost of about 150 million DH during the Plan and beyond.

— Haouz : cost of dam itself (figures not yet established).

The financing is being modified according to a detailed programme to be presented later by the contractor.

This table comprises allotments and additional credits. In particular economic equipment — which initially covered some operations such as oil-works, citrus processing plants etc.) has been reduced to a programme for cotton-ginning for a total amount of 1.1 million DH, since the Government feels that such operations should be financed by banks.

This improvement policy must be thought of in connection with a scheme by which present cereal irrigation methods (the profit of which is infinitesimal in proportion to the relatively costly investment = 1/10th. against 5/10ths. in dry cultivation with much more restricted equipment) will be replaced by more profitable operations and, in particular, the cotton-beet option, the agronomic consequence of which is that or rotation and zoo-technical or fodder speculation.

Internal equipment provided for under the investment programme presupposes that the farmers will submit to a certain discipline established, if possible, by contract or by regulation as to crops to be grown.

International consultants have confirmed that Government departments should undetake the regrouping of "melk" land and, on collective land, should lease lots of irrigated land in order to permit economic working of such land in rotation by large blocks.

These recommendations imply that we should establish actual "classes" of cotton-growers and beet-growers. An agronomist said: "It is better to grow two hectares of cotton well rather than manage to grow one hectare with each crop".

It must not be forgotten that the replacement of irrigated cereals by the "beet-cotton" option is intended to ensure that we are able to meet increased demand for sugar between now and 1967 (100,000 tons for the gross product).

Table 12. — Individualisation of O.N.I. action

1965		1966		1967		TOTAL		Grand total State + credit
State	Credit	State	Credit	State	Credit	State	Credit	
128.760	33.020	135.450	34.840	119.090	35.100	383.300	102.960	486.260

The financing provided for under "credit" means expenditure on internal equipment for allotted and private land which can only partially be taken in charge by the State.

Sugar refineries have a privileged place in the Plan, although the sources of finance are not known in detail.

Table 13. (in millions of DH)

Plants with start-up date	Capacity in a full year	Total cost (1)	Cost during the Plan			
			1965	1966	1967	Total
Gharb 1 - Sidi Slimane May 1963	27,300 tons granulated	68.0	12.0	25.5	5.5	43.0
Tadla - Souk Sebt May 1966	37,000 tons granulated and loaf	104.0	43.0	13.6	6.2	62.8
Gharb 2 - May 1968	37,300 tons ditto	105.0	—	14	39	53
Total (2)..	111,000 tons per year	277	55	53.1	50.7	158.8

(1) The participation of the State cannot be accurately determined here.

(2) Profitability is ensured both for granulated and loaf sugar to the advantage of the State. The profit varies between 800 and 900 DH per ton without expenditure in foreign currency.

212. — Dry cultivation

The bright outlook for irrigation should not allow us to forget that only 20 % of cultivable land in Morocco can benefit from existing sources of water.

The essential problem is therefore to obtain maximum profit from non-irrigable land, that is to say to choose them from among the best situated lands which are deep and able to retain rainwater.

Without ignoring the potential value of irrigated land, we should above all attempt improvement where it is easiest to achieve, i.e. in dry cultivation.

It is not so much a question of fresh investment as a new slant to Government policy. The usual means available to departments, especially the ONMR, should be sufficient, provided that there is serious renewal of existing structures, to see that producers seek more profitable production.

The Gharb, owing to its relatively moist climate, has possibilities of fodder cultivation which might be substituted for cereals with an annual cycle comprising beet and perhaps water-melon for fodder. Green fodder might be associated with dry fodder. Profitability is as follows :

Table 14. — Comparison of fodder with wheat

ITEM	MEAT			SOFT		
	Potential in kilos	Price per kilo	Gross profit	Potential per quintal	Price per quintal	Gross profit
1° - *Green fodder* Basis 80/100 tons per ha.	1.000	2,50	2.500			
2° - *Soft wheat* Basis 25 quintals per ha.				25	40	1.000

Stock-breeding

This affects directly 70 % of the population of Morocco, represents more than 2 milliard dirhams and amounts to at least 45 % of income agriculture.

Available figures are as follows :

— 2 million bovine stock ;
— 9.5 million ovine stock ;
— 5 caprine stock.
— 1.6 million equine and asinine stock ;
— 0.2 million camels.

Nevertheless this stock-breeding has a low profitability, the annual increase in stock being hardly more than 30 %, whereas the annual reduction due to slaughter and mortality is more or less equivalent.

Losses from mortality and emaciation amount to nearly 140,000 tons a year, while consumption is about 130,000 tons.

When climatic conditions are especially bad losses become disastrous both for the farmer and for the national economy.

This essential sector has serious deficiencies, of which the most important are :

— alimentary, since the fodder resources do not suffice for animal energy and there are no reserves.

Forestry and cereal growing have reduced pastures and many pastures lands have deteriorated.

— material, in so far as there are no properly designed shelters in bad weather.

— For health reasons. Prophylaxis against contagious diseases rarely affects more than 30 % of stock.

There are not enough veterinary surgeons (67 in all, including 5 Moroccans). Laboratories and vaccine equipment are also inadequate. Veterinary science is practically unknown in the countryside and affects barely 2 % of stock.

— Zoo-technical reasons. It is essential to safeguard the natural factors of the region to ensure survival of stock.

Resistant stock must be protected and selected.

Improvement of health conditions

The stock-breeding Department will be provided with extra staff (recruitment and training of 50 vets) and properly equipped so that systematic vaccination compaigns can be undertaken, measures taken against epidemics and general hygiene improved.

This activity will be reflected in the annual working budget. Nevertheless the Three Year Plan will provide :

— Laboratoty equipment in Rabat and Casablanca, artificial insemination centres, stud-farms etc.

— Collective treatment centres, dipping stations etc.

— Inspection and infirmary centres.

The total cost, without the ONMR credits, is about 7 million dirhams over the three years.

Breeding

The ONI has started a breeding scheme to improve bovine stock within the framework of sugar-beet growing in the Rharb and Tadla areas. This action must be extended and diversified by the "Office de Mise en Valeur" which will have the necessary credits, under the authority of the Stock-breeding Department. Nevertheless this will not suffice to affect deeply the whole of the sector.

As regards ovines genetic improvement will be sought in order to obtain a better output of wool and meat.

Caprine animals are at the same time a scourge for the community and a vital element for small farmers.

The Stock-breeding department will try to reduce the stock on a quantitative basis and replace breeds which are destructive to trees and vegetation by more or less sedentary animals.

Complementary action

This operation will concern all production based on animals, including birds and bees. Improvement of breeds and educational activity will cost about 6 million dirhams for the three year period.

Finally, and taking into account ONI activity, included in investment in the irrigated areas, public credits needed for the improvement and encouragement of stock-breeding are as follows :

(in thousands of DH)

	1965	1966	1967	Total
ONMR (stock-breeding)	7.000	9.500	9.950	26.450
Ministry - stock-breeding	3.000	5.000	5.000	13.000
Total	10.000	14.500	14.950	39.450

Table 15. — Comparison of barley and soft wheat

ITEM	BARLEY			SOFT WHEAT		
	Quintals	Price	Profit DH/hectare	Quintals	Price	Profit DH/hectare
Barley : Basis 7 q. hectare	7	22	154			
Soft wheat : Basis 5 q. hectare				6	36	216
% of sifting	58			77		

The driest land would allow for gradual substitution of soft wheat for barley. Soft wheat should be preferred since it can command a better price for the farmer — even if the output is less — and avoids a costly import programme (150,000 tons per year of wheat).

Finally, with the same intention of satisfying the population's need for cereals in the first place and an optimum use of dry lands, the substitution of soft wheat with a high output as opposed to "forced" wheat, we obtain a tonnage 50% higher. The higher price of the latter type and their importance as regards exports cease as soon as the country become an importer in 1962 instead of an exporter.

As regards areas requiring State aid, we must take into account both the extra value per hectare and the adaptability of the farmers to modernisation. In the last resort this latter factor should prevail.

According to experts priority should be determined as follows : in the first place,

- the Gharb, to which would be added a part of the pre-Riff area and the Chaouia, plus the Rommani district ;

secondly,

- the Meknes-Fez area plus the Taza corridor, the Doukkala and the best land in the Abda plain.

This choice will help to remedy the unbalance in areas where the ONI concentrates its activity.

The investments required by the ONMR are as follows :

Table 16. — Cost of investment

(in thousands of DH)

OPERATION	1965	1966	1967	Total
Nursery equipment	2.000	1.000	1.000	4.000
Agricultural equipment (ONMR)	6.000	4.000	4.000	14.000
Education	1.000	1.500	1.500	4.000

In order that this activity should be successful responsibility should be properly divided between farmers and the State. The latter should act as adviser and only intervene whene the farmers are prepared to join in the work. Apart from this it is intended that private plantations will receive CNCA loans to an annual amount of 5 million dirhams.

The State will thus be responsible for :

— Equipment of nurseries ;

— Renewal of agricultural equipment in Work Centres.

— Building ;

— Education and training ;

— Agricultural equipment in collective farms and economic equipment.

22. — Organisation of working on lands already adapted to modern agriculture

In this case State action must follows two equally important directions :

— To find an efficient system of allotments ;

— To take part in large projects where the surveys are sufficiently advanced but nevertheless avoiding expenditure which will not be compensated for by immediate profitability.

As regards allotments the two departments concerned must aim at permitting the up-to-date working of 190,000 hectares according to a timetable laid down by the Government. It should be noted that planted land may not be distributed to peasants as allotments.

Table 17. — Areas affected by allotments

	1965	1966	1967	TOTAL
Irrigated land	4,5	6,7	3,5	14,7
Dry land	32,8	63,0	53,0	148,8

N.B. — It is intended to carry out preliminary surveys of 30,000 hectares of dry land in 1967.

The problem is a dual one :

On the one hand the State, when handing over land, has the right to demand certain methods of working it. At the same time it must give poor farmers the means to work the land by modern methods. It must also prepare the land and provide trained supervisory staff. Nevertheless the State has no intention of working the land itself.

The result of such a policy for public finance is as follows :

— Training of personnel (ordinary expenses) ;

— Allotments and granting of credits (investment expenses).

Table 18. — Cost of personnel

(in thousands of DH)

OPERATION	1965	1966	1967	Total
Personnel : 1 employee per 50 lots 1 accountant per 10 employees				
ONI - 57,500 hectares	400	400	400	1.200
ONMR - 136,000 hectares ...	600	600	600	1.800
That is to say 300 employees at 10,000 DH each.	1.000	1.000	1.000	3.000

Table 19. — State action - Capital and credits

(in millions of DH)

OPERATION	1965		1966		1967		TOTAL	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Allotments on irrigated land (external equipment included) ONI action	15,7	4,8	23,5	7,2	12,2	4,3	51,4	16,3
Dry allotments ONI	8,9	15,8	5,4	9,6	4,9	8,8	19,2	34.2
ONMR	10,35	10,4	22,65	40,8	17,7	33,6	50,7	84,8
TOTAL	34,95	31,0	51,55	57,6	34,8	46,7	121,3	135,3

(1) Capital expenditure.
(2) Credit.

Adoption of this policy, the cost of which represents 1/4 of the all agricultural action under the Plan, means that all means must be combined and that no variation should be permitted as regards State action.

The first point is a question of selection of personnel young enough to accept a long-term job which will no doubt be disappointing and having sufficient education to do it.

The second point was a matter for contacts between departments and an analysis was made of the expenditure on allotments.

As regards **large specific projects** the Government has in mind :

- A huge operation for reconstitution of the soil (D.E.R.R.O.) ;
- The extension by work on equipment of preliminary surveys undertaken in two outlying areas (North-West and South-East) ;
- New surveys concerning the chances of dry cultivation.

Table 20. — Cost of large projects

(in thousands of DH)

OPERATION	1965	1966	1967	Total
Derro	8.595	12.455	12.420	33.470
Loukkos	1.700	6.600	14.200	22.500
Tafilalet	3.000	5.000	6.000	14.000
TOTAL	13.295	24.055	32.620	69.970

1. — Among these projects the rural development of the western Riff (DERRO) seems likely at least to provide a positive solution to the most serious problems in the north of Morocco where, owing to erosion, more than 1,300,000 people have to live on little more than 1,800,000 hectares with an income per family of 775 a year.

This project is concerned with soil conservation (1/3 of the total cost) and also with irrigation, tree-planting, improvement of the road system, agricultural education and the training or personnel.

Out of the total cost of the operation — spread over 5 years from 1964 to 1969 and estimated at 165 million DH — the Plan only takes into consideration the portion concerned with soil conservation, reafforestation etc. and 100 kms. of forest paths up to an overall cost of 42.47 million DH distributed in instalments of 10 to 16,4 million.

Of the subsequent projects that of Loukkos and Tafilalet are distinguished by the fact that both were prepared by regional missions of the ONI and may be financed internationally.

2. — According to the present state of the survey the Loukkos project consists of a choice between several schemes to irrigate a surface of 28,500 hectares for an overall sum of 270 million DH over a period of 14 years. The maximum requirements will be between the 7th. and 10th. year.

The object of the scheme is to extend the orange plantations in the RMEL area (10,000 hectares) and to introduce certain market-gardening growths in the Loukkos plain (tomatoes, soft pimento, melons, beetroot etc.) as well as fodder crops and industrial crops which could cover 6000 hectares.

According to whether sugar-cane or fodder is chosen for the main growth in the plain the proportion of increased to investment will be 36 % in the first case and 27 % in the latter.

3. — The Tafilalet project is more complex and the investment required varies between 30 and 150 million DH according to the scheme adopted. It will be noted that no considerable increase in production is envisaged until after scheme No. 4 (107 million DH).

The object of the operation is essentially to eliminate the rise of salt and then to acclimatize cotton and fodder beet. Its profitability would be ensured owing to the special adaptibility of the local farmers, who have already carried out hydro-agricultural work and are accustomed to manage the irrigation system among themselves.

The proportion of increased income to investment will probably exceed 30 %.

The Three Year Plan work involves the Moulouya basin, the establishment of pumping stations and spreading of flood water, at the same time as the first surveys for the Oued Ziz dam.

23. — Transformation of traditional areas

In this connection State action will for some time be a high-level "social service" intended to bring the moment nearer when distant and backward areas can receive and profit from large-scale public investment.

This service will be all the more effective in so far as it will not be given by isolated technicians but representatives of the locality and will be backed by provincial governors.

There is no question of preliminary "zoning" but State action must be adapted to the needs of the population and their desire to co-operate.

It is by no means intended, in the present state of public finance, to impose small equipment or improvement operations on the local population. They must fulfil a genuine need.

Investment has been laid down according to these principles :

23-1. — Irrigated sector

Table 21. — Cost of State action

(thousands of dirhams)

OPERATION	1965	1966	1967	TOTAL
Small perimeters (1)	1.517	1.467	2.061	5.045
Small hydraulic schemes .	10.562	13.652	15.771	39.985

(1) Skoura and Agadir.

The investment provided for small hydraulic schemes involve a large programme for irrigation systems in existing perimeters or outside these. The "Promotion Nationale" system will be used to the utmost.

23-2. — **Dry sector**

Table 22. — Cost of State action

(in thousands of DH)

OPERATION	1965	1966	1967	TOTAL
Equipment of open land	7.000	9.500	9.950	26.450
Communal land	18.060	12.640	13.200	43.900
Soil protection (see Table 23) ..	21.200	23.190	25.510	69.900

Out of 4 million hectares of open land in the country the Plan only intends to equip a quarter of it by creating perimeters of pasture improvement.

The investments will nevertheless be effected with the previous approval of the provinces and localities concerned which will indicate which land is to be dealt with, i.e.

- water-points, 1 to 10 kms.;
- fodder centres;
- tracks.

Rotation of pasture and limitation of stock will only be the second stage of stock improvement.

Apart from this it is intended to provide :

- 69 anti-parasite dips;
- 33 shelters;
- 33 fodder centres;
- 22 reproduction centres;
- 2 poultry centres.

Table 23. — Cost of State investment

OPERATION	1965	1966	1967	Total
Soil treatment	7.000	7.000	8.000	22.000
Reafforestation	10.000	11.000	12.000	33.000
Forest paths	3.400	3.700	3.900	11.000
Forest huts	800	1.490	1.610	3.900
Total	21.200	23.190	25.510	69.900

The Forestry Department, in making proposals for public investment, took into account the necessity to step up its usual action in the matter of soil conservation and reafforestation and to support the intergrated DERRO project.

Communal agricultural equipment

Table 24. — Cost of State investment

OPERATION	1965	1966	1967	Total
Communal equipment (1)	18.060	12.640	13.200	43.900

This work, which is carried out on the initiative of localities and with a subsidy which depends on the type of action involved, will not be enlarged during the next few years.

3. — "Promotion Nationale"

The PN is both a technique enabling the government services to make better use of their capital and labour and a means of carrying out extra work outside the scope of the annual budgets.

---

(1) About 20 % from the ONI and 80 % from the ONMR.

The Three Year Plan has drawn up the following programme :

Table 25. — P.N. works

(in thousands of DH)

OPERATION	1965	1966	1967	Total
Numbers of working days				
Water and Forestry	2.000	2.000	2.500	6.500
Small hydraulic projects	3.000	3.500	4.000	10.500
Soil improvement	500	750	1.000	2.250
Total	5.500	6.250	7.500	19.250
Cash expenditure				
Water and Forestry	6.000	6.000	7.500	19.500
Small hydraulic projects	10.000	11.000	13.000	34.000
Soil improvement	2.000	2.500	3.000	7.500
Total	18.000	19.500	23.500	61.000

4. — Action by the Ministry of Agriculture

Table 26. — Cost of State action

OPERATION	1965	1966	1967	Total
Stock-breeding	3.000	5.000	5.000	13.000
Public building	500	500	642	1.642
Fish-breeding	32	33	33	98
Seeds and fertilizer	3.000	3.000	3.000	9.000
Topography and surveying	5.200	5.140	5.800	16.140 (1)
Total	11.732	13.673	14.475	39.880

(1)	
Establishment and revision of chart	6840
Levelling	2100
Irrigation perimeter	7800
National survey department	P.M.
Land registration	P.M.

24. — Agronomic research

This occupies a separate place in State action since it not only applies to the qualitative improvement of modern farming but also to new production concerning Moroccan agriculture.

Table 27. — Cost of State action

OPERATION	1965	1966	1967	TOTAL
Agronomic research	5.795	5.235	4.960	15.990

Since we only know the different items of investment on the basis of geography or according to the details of large-scale work, it is impossible to analyse these operations well in advance.

It would appear that we have still to distinguish research in the strict sense from work which is sub-contracted, especially for those departments whose infrastructure must not overlap the work of the National Agronomic Research Institute.

It is nevertheless true that research, especially when it is used to improve existing agricultural production, is an essential factor of economic development.

3. — Conclusion and proposal for distribution of public investment and agricultural credits

The investment programme for agriculture for the Three Year Plan period appears to constitute a whole but not an absolutely coherent whole. It is nevertheless faithful to the principles originally accepted.

The choice deliberately made of most worthwhile projects, the means adopted in order to arrive at harmonious development etc. etc. make up a collective operation the different elements of which are interdependent.

Any assessment of this programme must therefore not be applied to the various regions or interest but to a general proposal the implementation of which does not appear to exceed the means at the disposal of the State.

Table 28. — Distribution of public investment and agricultural credit

	1965		1966		1967		TOTAL		Total State + Crédit
	State	Credit	State	Credit	State	Credit	State	Crédit	
AGRICULTURAL HYDRAULICS (ONI)									
Large perimeters	128.760	33.020	135.450	34.840	119.090	35.100	383.300	102.960	486.260
Small perimeters	1.517	—	1.467	—	2.061	—	5.045	—	5.045
Small hydraulics	10.562	—	13.652	—	15.771	—	39.985	—	39.985
Communal equipment .	4.030	—	2.930	—	3.040	—	10.000	—	10.000
Total O.N.I.	144.869	33.020	153.499	34.840	139.962	35.100	438.330	102.960	541.290
LAND SURVEYS	5.200	—	5.140	—	5.800	—	16.140	—	16.140
LAND DRY CULTIVATION (ONMR)									
Allotments	10.350	10.400	22.650	40.800	17.700	33.600	50.700	84.800	135.500
Breeding	7.000	—	9.500	—	9.950	—	26.450	—	26.450
Communal equipment .	14.030	—	9.710	—	10.160	—	33.900	—	33.900
Nurseries	2.000	—	1.000	—	1.000	—	4.000	—	4.000
Agr. equipment	6.000	—	4.000	—	4.000	—	14.000	—	14.000
Education	1.000	5.000	1.500	5.000	1.500	—	4.000	15.000	19.000
Total O.N.M.R.	40.380	15.400	48.360	45.800	44.310	38.600	133.050	99.800	232.850

MINISTRY OF AGRICULTURE									
INTEGRATED PROJECTS									
Rif - Derro	8.595	—	12.455	—	12.420	—	33.470	—	33.470
Loukkos	1.700	—	6.600	—	14.200	—	22.500	—	22.500
Tafilalet	3.000	—	5.000	—	6.000	—	14.000	—	14.000
Total	13.295	—	24.055	—	32.620	—	69.970	—	69.970
SOIL PROTECTION									
Conservation	7.000	—	7.000	—	8.000	—	22.000	—	22.000
Reafforestation	10.000	—	11.000	—	12.000	—	33.000	—	33.000
Forest paths	3.400	—	3.700	—	3.900	—	11.000	—	11.000
Forest huts	800	—	1.490	—	1.610	—	3.900	—	3.900
Total	21.200	—	23.190	—	25.510	—	69.900	—	69.900
ACTION BY MINISTRY ..	6.532	—	8.533	—	8.675	—	23.740	—	23.740
AGRONOMIC RESEARCH	5.795	—	5.230	—	4.960	—	15.990	—	15.990
"PROMOTION NATIONALE"	18.000	—	19.500	—	23.500	—	61.000	—	61.000
TOTAL AGRICULTURE ..	265.851	48.420	294.412	80.640	291.337	73.700	851.600	202.760	1.054.360

Table 29.

MAIN PRODUCTION AND EXPORT

	1960 - 1961			1961 - 1962			1962 - 1963		
	Area	Production	Export	Area	Production	Export	Area	Production	Export
Wheat	1.596.000	617.000	46.000	1.456.000	1.247.000	22.000	1.652.000	1.195.000	64.000
Other cereals	2.134.000	647.000	90.000	2.167.000	1.639.000	14.000	2.629.000	2.017.000	194.000
Leguminous	227.000	79.000	67.000	212.000	141.000	94.000	280.000	139.000	39.000
Tomatoes	15.000	270.000	96.000	15.000	270.000	134.000	15.000	240.000	127.000
Potatoes	14.000	135.000	59.000	14.000	125.000	96.000	16.000	130.000	80.000
Flax	18.000	3.500	2.000	19.000	11.500	1.500	11.000	5.630	1.800
Cotton	10.000	9.800	2.000	13.500	9.500	2.500	15.000	16.000	4.000
Citrus	55.000	472.000	362.000	55.000	450.000	347.000	55.000	420.000	362.000
Wine	70.000	2.300.000 hl	1.310.000 hl	70.000	1.896.000 hl	1.500.000 hl	70.000	2.600.000 hl	1.580.000 hl
Olives	155.000	181.000	6.300 (1)	160.000	139.000	6.500 (2)	160.000	145.000	64.000 (3)
Cork		39.000	38.000		37.000	23.000		46.000	30.000
Alfa		100.000	86.000		120.000	90.000		120.000	100.000
Animal production									
Meat		124.000	239		130.000	310		135.000	187
Milk		550.000			500.000			530.000	
Eggs		52.000	3.000		50.000	3.500		52.000	500
Wool		22.000	4.000		20.000	4.300		14.000	2.000
Hides		27.000	1.700		28.000	1.000		29.000	380

CHAPTER III

IMPLEMENTATION OF THE INVESTMENT PROGRAMME

1. – Financial backing
2. – Need for new structures
3. – Conclusions

The implementation of the investment programme for 1965-67 cannot be estimated solely on the basis of capital expended by the State for that period.

On the contrary, it must be estimated by taking into account the obligations coming on top of those already assumed and by adding to these expenses those which the State must face in order to obtain additional funds connected with the main operations — public credit — as well as working credits at least equal to those of previous financial years which it will be necessary to place at the disposal of departments for carrying out their new missions.

Table 30. — Financial backing for the Three Year Plan

(in millions of DH)

	1965	1966	1967	Total	After the Plan
Obligattons :					
- Budgetary expenses	265,8	294,4	291,3	851,5	250
- Recourse to medium and long-term credit through the departments	48,4	80,6	73,7	202,7	
Total				1.054,2	
Subtraction of known specific financing				110,0	
The State's share (including credit				944,2	250

It should be noted that credits asked for by the departments will rise from 47 million DH in 1964 to 186 million in 1967 because of the allotments.

The State's share in financing can only be appreciated if we take into account the cost of loans which may be negotiated and annual reimbursement of the latter.

Taking into account the specific financing of certain operations, the proposals for capital expenditure do not exceed the theoretical possibilities of the State during 1965-67. But the burden on the working budget and the actual possibilities of public credit force the Government to choose a certain number of priorities.

This choice will be redered easier by the estimate which has been made of State funds which will have to be employed to overcome the obstacles mentioned at the beginning of the chapter, the existence of which alone can prevent the implementation of the investment programme and the planning operations which result.

a) **The land-holding system.** — this problem is too well known for a long analysis to be needed.

The object of the Government is not to reform the system once and for all but to follow a policy in the economic and social interests of the country which can be split up according to the category of lands affected by the reform and their geographical situation. This policy will aim at permitting economically viable working of land.

Two types of action are possible. Either various formulas can be employed leading to individualisation with or without appropriation of land by private farmers or collective working can be instituted for which the State would be the sole guide. By the allotment policy it intends to follow the State reserves the possibility of simultaneously choosing one or other solution.

We know the arguments in favour of a final return of the land to private farmers : the producer has no interest in the land ceded by the State if he is not the owner, no personal investment or works if he has no legal claim to it etc.

We also known the State's interest in the matter : much higher expenditure and the need to ensure profitability — since mortgages are insufficient to guarantee, in the present state of affairs, reimbursement on work done or on advances — inability to abandon high quality production.

The drawbacks which were shown to exist when land was distributed following disqualification as citizens of some big landowners prove that this a real problem. Beneficiaries felt that this was a fair recompense for work already done and that they had the right to farm the land as they liked. Most of them thought it sufficient to let anyone work the land without funds, thereby wasting all previous improvements and making all rational working impossible.

The investments which the State has decided to assign to " operation allotments " are too great and the necessity of satisfying national consumption too vital for such a risk to be accepted.

The State therefore, having decided against a pure and simple hand-over of the land, must choose between the following two solutions :

— Firstly, to hand over the land to a beneficiary who has proved himself after a trial period but subject to a cultivation contract the terms of which will be fixed according to geography, type of land etc., it being possible to inherit such land.

- Secondly, distribution of the income from the land in the form of a right of usufruct which can pass to heirs, with a regulation of cultivation which nevertheless guarantees to the beneficiary that the expenses he has incurred may be reimbursed when he leaves the land if it is proved that they are due to his work. In this case the State, to ensure a good use of the land, will institute a rental based on the output of the land and the rate in inverse proportion to the appreciation, while a regional average will ensure the beneficiary against the risk of a bad harvest due to weather or other natural calamities.

Collective working has not been sufficiently thought out for a final formula to be devised. We may merely say that the temporary management of recovered land by the " Centrale de Gestion des Exploitations Agricoles " can be preserved in all cases where high quality production is essential, especially for export, thus making it impossible for small-holders to divide the land.

The Government must decide on the basis of technical and economic necessity and also of politics, where it alone can judge. The first solution has the advantage of giving sentimental satisfaction to beneficiaries and is initially less burdensome. The second holds out hope of greater profitability.

b) How to overcome the deficiencies

All the deficiencies mentioned above — lack of staff , credit etc. — are bound up with the need for a reform of the structure supporting the agricultural policy of the Government.

1. — Re-organisation of the Ministry of Agriculture

It is the Ministry's task to lay down policy, to instruct departments and check results. The Ministry studies and controls, while the departments and organisations carry out the policy.

Thus we must create :

- For planning purposes an **office for study and synthesis** which will have to give the Ministry all the necessary data. This will be constituted by using the study sections of the " Office de Mise en Valeur ".
- For control purposes an inspectorate to which provincial inspectors will be attached and whose task will be, in their own provinces, to approve the Ministry's policy and carry it out.

The " study and synthesis office " and the inspectorate general will be directly attached to the Ministry.

However, the lack of trained staff does not enable us at present to reform structures in a sufficiently thorough fashion. This would require too many central directing organisations.

The present number of directorates has therefore been kept.

Thus the National Institute of Agronomic Research, which is not executive, will belong to the Directorate of Agronomic Research and Agricultural Education.

The following chart shows the new organisation of the Ministry of Agriculture :

Apart from the Minister's office the Ministery includes :

- the Inspectors General and provincial inspectors ;
- The Research and synthesis office ;
- The General Secretariat which co-ordinates the directorates and divisions as follows :
  - Directorate of Economic and egal Affairs ;
  - Directorate of Water and Forestry ;
  - Directorate of Agronomic Research and Education ;
  - Directorate of Stock-breeding ;
  - General Administration section.

The Inspectorate General has to inform the Minister on all problems which concern the departments of the Ministry and ancillary organisations. The provincial inspectors control the activities of outside departments and represent the Ministry with provincial organisations etc.

The research and synthesis office, under the Minister, has to provide all data necessary for the carrying out of agricultural policy.

The General Secretariat co-ordinates the activities of directorates and ministerial departments.

The Directorate of Economic and egal Affairs has to :

- make a permanent inventory of agricultural resources. It must draw up statistics of produce and agricultural prices.
- study all improvements to be made to production ;
- Seek for internal and external outlets and improvement of sales.

It must deal with all questions relating to State action as regards supplies, sales, storage and processing of agricultural produce.

It must control the private companies which come under the Ministry and settle all legal questions in this connection.

The Directorate of water and forestry has to :

- — apply the legislation concerning land coming under this department ;
- — look after the alfa-growing country and deal with reafforestation ;
- — administer forest resources ;
- — study questions concerned with forestry education, fish-breeding etc.
- — control hunting and fishing in continental waters and develop these resources ;
- — orientate and organise forestry production, protect natural beauties and tourism in forests ;
- — deal with soil conservation according to legal requirements.

The Directorate of Agronomic Research and Agricultural Education has to :

- — Carry out all trials in connection with new cultures and improvement of existing cultures ;
- — Undertake all sorts of agricultural experiments ;
- — Fight against all harmful influence threatening agriculture ;
- — Organise all educational establishments coming under the Ministry.

The Stock-breeding Directorate deals with all experiments concerned with the Government's stock-breeding policy.

It has to protect stock and look after all animal produce intended for human consumption.

The Directorate of land-holding and topography

- — Studies the land-holding system and any reforms that may be needed ;
- — Looks after registration, conservancy and topographical surveys ;
- — Issues maps of the country and cadastral surveys ;
- — Centralises and files topographical documents.

The General Administration Section

This section is concerned with personnel, the budget, equipment, building repair etc.

It centralises affairs affecting subordinate organisations.

2. — **The Agricultural Improvement Office** (OMEVA)

As a result of the re-organisation of the Ministry the OMEVA will have the exclusive task of carrying out government policy as regards modernisation of agricultural methods.

This task comprises three successive stages :

1) General substructure ;
2) Long-term transformation of working conditions and potential production ;
3) Short-time technical aid to farmers, either material or intellectual.

The basic organisation of this Office will be as follows :

- **Central departments** comprising :
  - An equipment division :
    - Water department ;
    - Major hydraulic projects ;
    - Large-scale work ;
    - Rural equipment and small hydraulic projects.
  - An agricultural improvement department :
    - Internal equipment and regrouping ;
    - Allotments ;
    - Irrigation methods ;
    - Agronomy.
  - Agricultural intervention department :
    - Education and training ;
    - Equipment ;
    - Programming and supervision.
  - A financial directorate ;
  - An administrative directorate.
- **Provincial services** comprising :

A rural equipment service, an agricultural intervention service and, where necessary, supervision of irrigation areas.

The CMV and the CT are the basic entities for State action in agriculture.

The Office will be administered by a board of directors composed of representatives of the State and of the farmers.

The ONI and the ONMR will be abolished on the basis of a liquidation of debits and credits as on 31st. December 1964.

3. — Agricultural credit

This problem is a matter for the Government, if the principle is accepted by which the State should deliberately restrict its equipment programme to the essential requirements of farmers (independent of basic hydraulic projects, surveys, water-points etc.), if the initiative for secondary equipment is handed over, under contract or regulation of crops, to beneficiaries, if the latter are applicants vis-à-vis the State — it is essential that the necessary funds should be provided to deal with this situation.

It has shown in the table that farmers need a relatively large amount of credit vis-à-vis lending organisations and extra funds must therefore be obtained to enable these organisations to meet the requirements of improvement in their areas within the scope of the irrigation department, that of the ONMR and the allotment scheme.

On the one hand the CNCA may be authorised to make maximum use of its rediscount bill with the Issuing Bank and, on the other hand, a rapid modernisation of the credit system must take place. There are three possible solutions :

- To give the CNCA its own capital and to turn it into a State company, the advantage being that its board of directors will have full authority to grant loans and will be able to lay down its policy according to economic imperatives.
- To call upon public savings by orientating private funds towards the CNCA, which requires propaganda out of all proportion to that at present directed at small investors.
- To grant the CNCA a rebate from treasury resources on interest, which is equivalent to paying it a balancing subsidy.

To be efficient the Governement must opt for the solution the profitability of which is the best ensured by creating a company controlled by the State. It must be in working order for the beginning of the 1965-66 agricultural season, which will mean that it will be possible to cover the last two years of the Plan when credit requirements will be most considerable.

Besides these two problems, those of the choice of an improvement policy and the need for previous surveys are of course equally important from the technical point of view but much less perceptible owing to the limited funds disposable : in fact the State has to assume responsibilities which its Government has no intention of avoiding by determining " up the line " from various forms of State action the imperatives of a policy which must obviously subordinate the " concrete " of to-day to the " planting " of tomorrow and the earmarking of credit to basic surveys.

3. — CONCLUSION

It is no doubt easy to say that all operations proposed under the present programme of investment have all reached an equal degree of maturity and that it is impossible to make a difference between irrigated areas, ONMR areas, Agronomic Research etc.

At the outset of this Three Year Plan the Government should not be satisfied with such an approximation. Assuming parliamentary approval for this policy and structural reform at present contemplated — such as the amalgamation of the different departments in a single specialised geographical organisation, a choice should be made of sectors where the chances of economic benefit are the greatest.

We should therefore concentrate on "dry cultivation" and especially on fodder and meat production, also the replacement of " forced " wheat by high output wheat, bearing in mind that they require limited funds.

As regards hydraulic works, the Government must make two successive choices, by first singling out priority areas and secondly by confirming the preference to be given to beet-cotton operations over irrigated cereals.

As regards specific projects it will give priority to the DERRO operation while making the Loukkos and Tafilalet projects dependent on private financing.

For soil protection it will grant the maximum of credits asked for in connection with the annual budget possibilities. The Forestry Fund may possibly receive extra allocations which will enable it to meet a small portion of the extra working fund of specialised departments having to cope with the speeding up of projects.

As for agronomic research, absolute priority must be given to applied research and the Government will have to remove from the Three Year Plan the greater part of fundamental research. Officials of this department will, in this connection, make concrete proposals to the Government before the outset of the Plan.

In all the foregoing sectors (except for research), as in that of rural equipment, the Government will especially favour projects depending on the "Promotion Nationale" which is a technical means f developing the economy of the country and not merely an ins- rument for the distribution of income in favour fo the depressed ections of the population.

Thus there will be a kind of barrier capable of restraining the light to the towns.

If the preparation of a plan is justified by the State's obligation o enable the greatest possible number of people to lead a happy ife, the agricultural investment programme will be mainly res- ponsible for the success or failure of such a policy.

Everything will therefore depend on the effort made to carry through to the end the objectives which hitherto have merely been defined.

SECTION II

TOURISM

1. – General remarks
2. – Basic information
3. – Aims
4. – Means at our disposal
5. – Investment table
6. – Draft law on the ZAP (Areas to be given priority)

1. – General remarks

Tourism is one of the priority sectors of the Three Year Plan.

On the one hand we can hope for relatively rapid results in this sector owing to the present development of international touring. The problem is not so much to create a demand as to satisfy it.

On the other hand, in a country like Morocco tourism is one of the most profitable economic activities. There are numerous indirect advantages in the entertainment industry, transport, commerce, building etc. It can have an important effect on the balance of payments and provides numerous jobs for which no great technical skill is required.

Finally Morocco already possesses important touristic " capital " It can attract tourists all the year round (beaches in the summer, beautiful cities and the South in winter) although this distinction is now less marked. It is a country situated at the gates of Europe, the chief source for the export of tourists (who are more and more inclined to go by road and use caravans). Moreover it is already partially equipped (communications, hotels etc.).

It is worth noting that in 1960 foreign tourism brought Spain 500 million dollars, i.e. 50 % of the value of all Spanish exports, and that in 1963, tourism amounted to the following proportions of import of foreign currency in the following countries :

France : 7.8 % ;
Italy and Greece 11.6 % ;
Sweden : 14.5 % ;
Austria and Ireland : 19 % ;
Spain : 31 %.

It is believed that at present tourism accounts for the movement of 80 million people per year about the world.

It is hard to tell the exact number of tourists who come to Morocco every year. Statistics only show that the total of tourists and businessmen was as follows for the different years: 151,000 in 1961, 182,000 in 1962 and 266,000 in 1963. The proportion of tourists in this last total was certainly very high (about 200,000) but we can only know for certain by making an exact survey.

Foreign currency earned is estimated by the Comptabilité Natio
nale at 161 million dirhams in 1962 and 218 million in 1963. Th
direct advantage is obvious but it should be remembered that ther
is a powerful influence in reverse. Several tens of thousands o
relatively well-to-do residents return to Europe at holiday time an
during the summer, while official, private and business trips are o
the increase. The currency officially granted for these trips amounte
to 186 million dirhams in 1963.

⁂

II. – Basic facts regarding tourism in Morocco

a) Because Morocco's touristic advantages are considerable, private entreprise is very active in this sector. Such activity should be encouraged as much as possible, for tourism in Morocco cannot develop without it.

b) This does not mean, however, that State action should be limited to the substructure. The need is such that in some cases the State may well provide an extensive hotel equipment.

State action should be based on experience, (SOMADET, MAROC-TOURIST, ONCF, ONMT).

c) Financial limitations mean that there must be rigorous selection and the area must be chosen with the greatest care.

d) Training of Moroccan staff is also essential and, from the strictly economic point of view the employment of foreigners sends up costs.

⁂

III. – Aims

The Three Year Plan should adopt, as its aim, the number of tourists it will receive in 1967. The number should be as high as possible in view of the priority given to this sector.

The difficulties to be overcome are as follows :

- Sufficient rapid construction of new accomodation ;
- Recruitment of personnel ;
- Efficient co-ordination of all necessary undertakings: travel agencies shipping and airways.

a) Accommodation capacity.

Taking into account the geographic distribution of accommodation, seasonal trade and the requirements of local tourists, we may say that Morocco can receive 280,000 tourists, representing 3,400,000 units with an average stay of 12 days per tourist.

With 1800 beds and an average occupation of 5 months per year the chalet-type hotels can provide 1800 X 150 = 270,000 units.

With 12,000 beds and an average occupation of 9 months per year the regular type of hotel can provide 12,000 x 270 = 3,240,000 units.

The rest, that is 90,000 units, can easily be provided by other means (reception by relations and friends).

However, in this calculation the average length of occupation is considerably higher than that usually recorded. We have taken into account the natural increase in utilisation of available accommodation resulting from increased tourism. This development must be upheld and reinforced, since it allows us to ease the burden of fresh investment and increases the profitability of all activities connected with tourism (especially the hotel business and transport). There will be a general application of on-season and off-season rates which can attract numbers of people at the beginning and the end of the usual tourist periods. We can therefore count on 170 days for chalet-type hotels and 270 for the regular type hotels.

We shall further on that new accommodation which can be expected during the plan period would amount to 20,000 beds, three-quarters in regular hotels.

Total availability would thus be :

— Regular type : 27,000 x 270 = 7,290,000 ;
— Chalet-type : 6800 x 170 = 1,156,000 ;

Total 8,446,000 units

or about 700,000 tourists staying an average of twelve days each.

b) Recruitment and training of hotel staff.

We must make provision for 8000 new jobs. This round figure covers a wide variety of qualifications and it is certain that the training capacity at present available is quite inadequate.

Accelerated training would partially fill the gap but for a time we should have to introduce extra-rapid training.

It would however be risky to accept a lowering of standards of service. This sector therefore creates a bottle-neck, and this demands a special effort.

c) Rapid increase in turn-over.

The average overall increase of tourist activity would probably be 40 % per annum. Such development would necessitate extra investment on the part of transport undertakings. They have been calculated and appear to be feasible in the period allowed for.

Taking into account these different considerations the objective initially estimated would be 700,000 tourists in 1967. Everything, however, will depend on training of staff.

⁂

IV. — Means at our disposal

These come under two main headings :

— **Means to be employed outside the country :**

— Presentation abroad ;
— Co-ordination of supply and demand ;

— **Means to be employed locally :**

— Substructure ;
— Superstructure ;
— Training of staff ;
— Action to deal with prices.

A. — MEANS TO BE EMPLOYED OUTSIDE THE COUNTRY

1) **Publicity abroad**

Some effort has already been made in this direction. At the outset of the Three Year Plan we may refer to the activities of the Ministry of Tourism and the ONMT. Agencies have been set up abroad, publicity has been more adequate, there has been co-ordination between the ONMT and Royal Air Maroc as well as the Office Chérifien d'Exportation.

However, this laudable effort has been somewhat diffuse. It will be necessary to localise publicity, decide on its intensity and on the question of who is to carry it out.

a) Localisation of effort :

The most accessible public which can be in the first place attracted to Morocco is to be found in WESTERN EUROPE and NORTHERN EUROPE. Criteria are as follows :

— Existence of historic links with Morocco — convenience due to the fact that the language of the country is familiar to Moroccans.

— Existence of a foreign minority ;

— Existence of direct communications — relative proximity — the degree of exoticism exercised on various national groups by Morocco — standard of living of a great many Europeans which allows them to take holidays abroad — the Moroccan climate.

We may say that the countries of greatest interest to the Three

Year Plan are :

- FRANCE ;
- SWITZERLAND ;
- GREAT BRITAIN ;
- THE BENELUX COUNTRIES ;
- GERMANY ;
- SCANDINAVIA ;
- NORTHERN ITALY.

b) Intensity of effort

Considering the above data, publicity must so to speak be concentrated on these countries. Other likely countries exist, of course, but no dispersal of effort must be allowed.

The country must be presented as follows :

- Morocco is a country of the sun (beaches) ;
- It has an ancient civilisation (artistic cities) ;
- It is a modern country (hotels etc., communications) ;
- It is rich in artistic traditions (handicrafts, folklore etc.) ;
- It has a traditional of hospitality.

These forms of publicity are habitually used and nothing need be added in the Plan.

c) The ONMT (Office National Marocain du Tourisme)

This will have to be reorganised in order for it to be able to do its work efficiently. This following are its duties under a law of October 1946 :

- Publicity ;
- Reception ;
- Co-ordination of action in favour of tourism ;
- Regulation of tourism.

The ONMT will have a board of directors. It will be relieved of direct management of the chain of hotels, which will form part of another semi-official organisation. While continuing to advise the Hotel School it will hand over the management and teaching.

It will be given adequate means in order to :

- See that the regulation of prices is observed ;
- Control the use of subsidies and the placing of investments by the State or with the help of the latter ;
- Draw up statistics and make them more accurate.

2) Co-ordination of supply and demand

Modern tourism is more and more organised. Thus a link must be established between the supply (accommodation, transport, amusements) and the demand (tourists). This will be done through travel agencies.

Normally the travel agencies have an important part to play. They organise tours etc. and advise their clients. Knowing the wishes of the latter they can act as advisers to hotels, restaurants, transport companies etc.

Nevertheless there may be two drawbacks :

— The travel agency may no longer play its true part but merely act as a ticket seller, which does not help Morocco's economy.

— If agencies are too numerous and dispersed they will be ineffective, thus unable to make a construcitve contribution.

In Morocco there are some 90 agencies, of which only a very small minority are Moroccan. Nearly all of them stick to selling tickets and do not attempt real touristic activity.

As in some European countries Morocco might create a national agency able to present an interesting exterior and with means at its disposal allowing them to represent its country abroad.

The Government is studying this proposal, which on the face of it presents the following advantages : complete centralisation concerning supply and demand, better utilisation of transport and accommodation, better information on the chances of modifying prices, improvement of statistics, the possibility of official intervention and orientation of tourism.

B. — MEANS TO BE EMPLOYED INSIDE THE COUNTRY

SUBSTRUCTURE

a) Selection of areas to be equipped

What foreign tourists seek in Morocco is basically this :

— The sun and the sea ;

— The climate and the imperial cities ;

— The South.

Snow and mountains are not a great attraction in Morocco. In this respect Europe is obviously superior and it would be rash to try to compete with her for some time.

In the light of what has been said, we must decide what areas are to receive most attention.

As a general estimate we may say :

- The Mediterranean Coast ;
- Agadir ;
- Rabat, Meknes, Fez, Marrakesh, Tetuan ;
- The South.

However a three-year priority, when funds have been allotted, can only affect a certain number of " points of impact ".

A selection must be made by taking account of the following

- " Natural " tourist routes ;
- Wishes of clients ;
- Ease of access ;
- Work already begun ;
- Reputation of the locality.

The " points of impact " of the Three Year Plan must therefore be :

- Tangier area ;
- Esmir area ;
- Al Hoceima area ;
- Agadir ;
- The South ;
- Tour of the imperial cities.

b) Basic equipment

In the first place land speculation must be prevented and the sites preserved by appropriate llegislation with a law determining priority areas. (see appendix 1).

There is a company for the survey and development of the Mediterranean littoral and other companies for its equipment. I will therefore be necessary, in order to have unity of conception and concentrain of available means, to transform the Survey and Development Company into one dealing with Priority Zones (ZAP). This single company will be supported by legislation.

It will be required to prepare legal texts concerned with the fight against land speculation and to ensure their application.

To be more precise the following work has to be carried out :

TANGIER AREA

TANGIER BAY

- Draining of the marshy area at the east end of the beach ;
- Reafforestation ;
- Road from Tangier to Smir ;

- Equipement at Ksar Seghir ;
- Improvement of telephone services.

SMIR AREA

- Reafforestation Mdiq/Smir ;
- Mdiq harbour ;
- Lay-out of Cap Noir ;
- Completion of improvements at Smir.

AL HOCEIMA AREA

- Road from Al Hoceima to Cala Iris ;
- Improvement of neighbouring beaches (Cala Iris) ;
- Reafforestation round the whole bay ;
- Water to be laid on ;
- Supply of electric power.

AGADIR

The object is to see to it that Agadir has everything to make it the Moroccan resort par excellence.

THE SOUTH

- Metalling the track from Agdz to Zagora.

THE IMPERIAL CITIES

Tetuan - Fez - Meknes - Marrakesh - Rabat.

- Embellishment of the towns, clearence and improvement of historic sites ;
- Restoration of monuments (municipalities) ;
- Road from Fez to Al Hoceima.

SUBSTRUCTURE

1°) Accommodation :

a) TANGIER AREA

- Building of hotels both for tourism and for international conferences ;
- Organisation of a holiday camp ;
- Camping and caravan sites (bearing in mind that Tangier is a link between Europe and Morocco)

b) SMIR AREA

- Completion of hotels at Restinga and creation of a bathing resort at Cap Noir.

c) AL HOCEIMA AREA

— Construction of hotels at Al Hoceima and Cala-Iris ;

d) AGADIR

— Hotel construction on a relatively large scale from 1966 onwards will encourage private investors to follow the trend. It is certain that Agadir will be a centre of attraction for the following reasons :

  — in itself (climate and situation) ;

  — As a bridge-head to the South.

It should be noted that this resort can carry on thoughout the year owing to its climate. This is a factor aiding the profitability of hotels.

e) THE SOUTH

The South is, generally speaking, frequented by groups of tourists. The characteristics of this kind of tourism are as follows :

— A group contains from 40 to 50 people (capacity of a coach) ;

— The tours are arranged so that the tourists stay in practically all the hotels in the area.

More and more are also going in private cars. The complete improvement of the " southern highway " between Ksar-es-Souk and Ouarzazate will be of great advantage here.

The tourist season in the South now lasts eight months and conditions are trying in summer, especially as hotels are not designed for this.

A certain of class of medium-income tourists might be attracted to the South in the hot season, provided that air-conditioning were provided. The former design of these hotels would make such a process very difficult if they were air-conditioned throughout.

Therefore only the restaurant and new rooms would be air-conditioned. One third of the motel rooms would be so treated.

The rest-houses (gîtes d'étape) are filled to capacity at peak periods and sometimes (when the roads are cut by snow in winter) emergency measures have had to be taken. But insufficient accommodation must not be an obstacle to one of the greatest tourist assets in the country.

The Plan therefore is to provide 250 extra beds, half of which would be an extension of existing hotels in the area and half would consist of motels in the towns themselves, less comfortable but better adapted to the needs of isolated motorists.

f) THE IMPERIAL CITIES

Construction of motels having the same capacity with modern omfort but simpler.

2°) **Who is to carry out the Plan ?**

There will be two types of implementation :

a) Private entreprise. The State will help with hotel credit and by equipping the territory. This is the more important of the two.

b) The semi-official sector which is dispersed as follows :

— The ONMT, which runs all its hotels itself, with the exception of the hotel at Chaouen, the management of which has been entrusted to MAROC-TOURIST (a subsidary of the Caisse de Dépôts et de Gestion).

— The ONCF, which runs its own hotels ;

— The SOMADET company, comprising the ONMT, the BNDE, the RAM, the BMCE and the CDG, which is associated with three French groups, the Club Méditerranée at Al Hoceima, the CET in Tangier (Malabata), and the CDC at Mdiq.

In these three cases the foreign company is the tenant of all the hotels constructed in common.

— Maroc-Tourist, which is a subsidiary of the CDG.

TABLE (state at the beginning of 1964)

Number of beds belonging to the semi-public sector (all categories) :

Group	Number of beds
O.N.M.T.	376
O.N.C.F.	987
SOMADET	1.800
MAROC-TOURIST ...	650
	3.813

Out of a total of 13,800 beds
or 28 %

3° — MEANS PROVIDED BY THE CENTRAL AUTHORITIES FOR THOSE IMPLEMENTING THE PLAN.

a) Private sector

The encouragement given to this sector must be maintained and extended in proportion to the effort required.

1. — Investment Code

- — Tourism is to be regarded as a basic industry (Royal Decree of 21.12.60)
- — Exemption from customs duty to be applied unrestrictedly except in the case of protection of local industry.

2. — Taxation

- — Taxation must be more flexible and must be fixed for a relatively long period.

3. — Hotel credit

- — The amount of this must be fixed between 60 % and 80 % of investments according to the economic advantage of the project.
- — This credit must be changed from mortgage credit to economic credit based on the utility of the project and not on the value of the property motgaged.
- — Simplification of the mechanism of hotel credit.

4. — National Investment Fund

- — Extension of investments considered to be productive.

b) Public or semi-public sector

Two semi-official companies should normally exist :

1. — A company for participation without management, SOMADET. It will specialise in founding holiday camps but can entrust the management of these to any organisation.

2. — A company for participation and also for management which will cover Maroc-Tourist, the ONMT and the ONCF. It could include other semi-official companies dealing with tourism, such as Royal Air Maroc.

These two companies should have funds allowing them to intervene efficiently in the hotel sector. Credits will be placed at the disposal of the company for participation and management.

2. — Transport

a) Two main means of transport are used by tourists :

— Surfaces routes across the Straits of Gibraltar ;
— Intercontinental routes, mainly by air.

In both cases Moroccan transport must be reinforced to meet ever increasing demand.

b) **Implementation**

On the one hand we must create a Moroccan company to provide a car-ferry across the Straits.

On the other hand modern aircraft must be purchased for Royal Air Maroc.

3° — AMUSEMENTS

Apart from obvious amusements such as casinos, night-clubs etc. we must organise amusements of a fundamentally Moroccan type.

We should therefore :

— Arrange festivals with fixed dates ;
— Set up a national folklore troupe ;
— Members should be selected and paid ;
— Dances and songs should be fixed ;
— Clothing should be determined ;
— Movement of the troupe should be from one tourist centre to another.

TRAINING

Training of hotel staff will be profoundly modified in order to cope with touristic development. This will be a matter for the Ministry of Education (Technical and Professional).

The Three Year Plan proposes to create 8000 new jobs and hotel training will probably affect one third of the whole, i.e. 2600 persons. The rest will be trained while at work.

We cannot achieve this during the three year period. We must therefore make the use of training while at work.

This operation is analysed in the chapter " TRAINING ".

C. — PRICES

1° — Prices are important as regards presentation of Moroccan tourism, especially by comparison with other tourist countries.

There must be a certain balance between freedom and control.

The chief items in a tourist's budget are :

— The journey ;
— Board and lodging ;
— Transport inside the country ;
— Expenses and purchases in Morocco.

Although airlines and steamship companies charge similar rates on the international level and a certain amount of flexibility allows differential rates, often below the official rates, and although inside Morocco the State grants considerable advantages to tourists travelling by car (petrol cheques), it may be said there is a certain degree of anarchy, especially in the hotel and restaurant business.

There are many reasons for this. It is mainly a question of failure to adapt this sector to the realities of tourism. En passant we may say that it is a mistake to make Morocco a country of de luxe hotels, of expensive holidays.

2° Grading of hotels and price control

a) Hotels in Morocco will be graded according to the system prevailing in other tourist countries and that approved by the Ministry.

Within each category the will be fixed with a maximum and minimum. A classification commission will be set up presided over by a representative of the Ministry of Tourism.

b) Moroccan restaurants will be given categories. The classification commission will be the same as for hotels.

3°Cost of building

Building in Morocco is too expensive compared with foreign countries which concern themselves with tourism.

Right from the start Morocco is in an inferior position.

This cannot be explained solely by what is often called the " passion for concrete ".

Even within Morocco itself one can observe considerable differences between the various towns. The following table will give an idea of this :

Cost in dirhams of a square metre of covered space according to the type of construction as on 15th. May 1964 :

(Basic construction without fittings)

CENTRE	Collective buildings		Villas	
	Luxury	Ordinary	Luxury	Ordinary
Casablanca	350	250	350	300
Rabat	410	340	400 à 450	360 à 400
Meknes	380	250	450	280
Tangier	270	180	600	350

Steps must be taken in this field after a study of the problem, which creates a bottle-neck.

Moreover hotel and restaurant equipment is still mainly imported from abroad. It is taxed regardless of the use to which it is to be put.

In conclusion we may say that touristic development faces four main bottle-necks :

⁂

TOURISM

ESTIMATE OF INVESTMENTS

(in thousands of DH)

SECTORS	Publics funds			Credit			Private funds			Total
	1965	1966	1967	1965	1966	1967	1965	1966	1967	
Accommodation .	12.000	20.000	35.000	30.000	60.000	80.000	15.000	25.000	50.000	327.000
Outside the Plan .										13.000
Infrastructure	12.000	20.000	25.000	—	—	—	—	—	—	57.000
Transport	5.000	5.000	—	5.000	7.000	10.000	—	—	—	32.000
Total	29.000	45.000	60.000	35.000	67.000	90.000	15.000	25.000	50.000	429.000 (x)

(x) 13,000 hors outside the Plan.

Construction of hotel accommodation

The State will intervene (through a semi-official company) to build hotel accommodation by means of two specialised companies, one to construct holiday camps and the other chalet-type hotels.

Moreover it will encourage private investment to the utmost.

Parallel with such action means will be sought to make the Moroccan hotel business competitive. This will be done by :

- Taking action as regards building costs ;
- Taking action as regards the sale price of " tourist services ".

Training of staff

The State will provide the necessary mechanism for this. In the immediate future temporary plans will be made for accelerated training in close association with the existing hotel net-work.

Transport and communications

The construction of tourist roads, the improvement of telephonic communications between the North and the rest of Morocco, the setting up of a Moroccan navigation company working across the Straits of Gibraltar and modern re-equipment of Royal Air Maroc will be important factors.

4° The structure of tourism

The creation of a National Travel Agency, realistic and flexible, the reform of the ONMT and the creation of a company to improve the territory with lega land financial powers will give a new stimulus to the tourist trade.

It should be clearly emphasised that both the authorities and the trade itself must give up their outdated notions of an " arty-crafty " and " folklore " tourism and approach this new twentieth-century industry in a serious spirit. This is essential for its success.

JUSTIFICATION DES INVESTISSEMENTS PREVUS (En millions de DH)

	INVESTISSEMENTS A ORIENTATION PRIVEE		INVESTISSEMENTS A ORIENTATION PUBLIQUE			
	Villages de vacances	Hôtels - Motels	Infrastructure	Hôtels Motels divers	Stations Balnéaires	Divers
ZONE DE TANGER		Projets en vue de réalisation : Hôtel : 215 ch. ou 430 lits coût 7,0 Hôtel : 300 ch. ou 600 lits coût 10,0 Hôtel (SAT) à PUNTA CERES : 500 lits coût 8,0 Prévisions : 5 hôtels dans la nouvelle station. 5 x 100 ch. = 500 ch. ou 1.200 lits coût 20,0.	Route TANGER-RESTINGA Reboisement Baie de TANGER et entre TANGER et ACILA 0,7 Aménagement KSAR SEGHIR 11,15	Village dans la nouvelle station (SOMADET) 800 lits coût 2,4 Terrain de camping Caravaning Capacité 100 coût 0,3	Nouvelle station Balnéaire dans la baie de TANGER coût 37	Société de transport maritime dans le Détroit de GIBRALTAR coût 20,0
ZONE DE SMIR	Villages de vacances à M'Diq 650 lits coût 10,0	Projet à l'étude : Hôtel + Bungalows 350 lits coût 7,0 Hôtel pavillonnaire SAT à CAPO NEGRO 600 lits coût 8,0 Prévision 600 lits coût 9,0	Reboisement 0,7 Aménagement Restinga P.M. (achèvement) Aménagement CAPO NEGRO 20,0	Hôtels et bungalows (MAROC-TOURIST) 602 lits coût 8,9		
ZONE D'AL HOCEIMA		Hôtel à CALA IRIS 120 lits coût 1,8 Divers (Plages environnantes) 200 lits coût 3,5	Route AL HOCEIMA CALA IRIS Revêtement route AL HOCEIMA - FES Aménagement plage CALA IRIS 5,0	MAROC-TOURIST 294 lits 4,7 Hôtel 160 lits 2,8		

AGADIR		Projets en vue de réalisation : Hôtel pavillonnaire ONA (SOMADET) CM 800 lits coût 8,0 Hôtel SAT 600 lits coût 8,0 Hôtel Marhaba 160 lits coût 3,2 Hôtel 50 lits coût 1,0 Prévisions : 6 hôtels à 100 ch. soit 600 ch ou 1200 lits 18,0	Stabilisation de la plage 0,5 Reboisement 0,2	Hôtel pavillonnaire 160 lits 1,5 Hôtel pavillonnaire (projet R.A.M.) 300 lits 2,5		
VILLES IMPERIALES **(Rabat-Meknès-Fez-Marrakech)**		Chaine de motels : 4 x 80 ch = 320 ch. ou 640 lits coût 10,0 Hôtel à FES 160 lits coût 2,8 RABAT-Hilton 500 lits coût 15,0 RABAT Europahôtel 400 lits coût 8,0 Marrakech 600 lits coût 10,5	Embellissement RABAT-FES MEKNES MARRAKECH P.M.	Variante : chaîne de 4 motels de 640 lits coût 10,0		
GRAND SUD		Prévision (Divers) 600 lits coût 12,0	Revêtement route AGDZ ZAGORA	125 chambres réparties dans les hôtels du Sud 250 lits coût 3.75		
DIVERS		CASABLANCA Hôtel PANAM 500 lits 13,0 Corniche 600 lits 25,0 Autres plages atlantiques 1.000 lits 15,0 Stations (IFRANE-KETAMA OUKAIMEDEN, CHAOUEN etc. 1.000 lits 15,0 Non localisés 2.450 lits 36,7		Auberges jeunesse 500 lits coût 2,0 SIDI HAREZEM 200 lits coût 3,0 NADOR 120 lits coût 1,8		Equipement RAM 17,0 Ecoles Hôtelières P.M.

JUSTIFICATION OF INVESTMENT PROPOSED

GLOSSARY

« Village de vacances » = holiday camp.

« lits » =beds

« coût » = cost

« projet en vue de réalisation » = project to be carried out

« projet à l'étude » = under study

« prévisions » = estimates

« hôtel pavillonaire » = chalet-type hotel

« station balnéaire » = bathing resort

« auberges jeunesse » = youth hostel.

6. — Draft law on priority areas.

This can be found in the « Bulletin Officiel » for 1964 under the heading « Projet de loi portant sur la création de zones à aménager en priorité » (Z.A.P.).

CHAPTER III

TRAINING PROGRAMME

CHAPTER III

Training programme

PREAMBLE

SECTION I. — **EDUCATION**

Policy

- Balance-sheet of the Five Year Plan
- Aims of the Three Year Plan

Requirements

- Reminder of objectives
- Technical studies

Equipment programme

- Second degree
- Higher education

SECTION II. — **SPECIALISED EDUCATION**

- Training of teachers
- Agricultural education
- Professional training
- Hotel training
- Military schools.

Preamble

Now that the 1959-64 Five Year Plan has ended a new Plan has been worked out. The 1965-67 Three Year Plan.

The Five Year Plan had laid down an educational policy based on the achievement of five aims :

— The spread of education ;
— Arabisation ;
— Unification ;
— Moroccanisation ;
— Training.

The Three Year Plan ensures continuity and its aims are identical.

The new plan will moreover lay down priority sectors for the economic and social development of the country :

— Agriculture ;
— Tourism ;
— Training including professional training.

The need to strike a balance between economic dévelopment and education means that secondary education becomes a strategic sector. Expansion here must have urgent priority.

Thus the educational programme of the Three Year Plan will concentrate on training secondary school teachers and improvement of agricultural education.

Moreover the plan will be notable for its reform of primary education with a view to strengthening it and basing it on a better system of civic and religious instruction.

⁂

SECTION I

Education

EDUCATIONAL POLICY

Policy since independence has been based on the following principles :

- Spread of education ;
- Arabisation ;
- Unification ;
- Moroccanisation and training.

The Three Year Plan is intended to pursue these same objectives and finally to achieve them.

The balance-sheet of the Five Year Plan and the outlook for the Three Year Plan as regards Education will be studied successively under these five headings.

⁂

Balance-sheet of the Five Year Plan

I. — THE SPREAD OF EDUCATION

1. Secondary :

During the five-year period. Admission to secondary schools was set at 40 % of those taking the entrance examination, which gives the following figures :

— June 1960	10,630
— June 1961	16,100
— June 1962	23,600
— June 1963	32,600
— June 1964	50,000

2. Higher education :

As a corollary to admissions in secondary education the figures for higher education rose from 3700 to 7000 during the Five Year Plan period.

II. — ARABISATION

1. Secondary :

Literature and similar subjects will be taught in Arabic, which means a considerable increase in the Arabic timetable.

2. Higher education :

Arabic has been introduced in the Faculty of Letters and Law. In 1964 courses were held in Arabic technical terms for students and teachers.

III. — UNIFICATION

The policy is to make a synthesis of two types of instruction :

— one is traditional and unsuitable for the world of science ;

— the other did not do justice to national, Arab and Muslim values.

IV. — MOROCCANISATION AND TRAINING

Moroccanisation of technical and administrative posts in th public and private sector is a question of adequate training.

The Ministry of Education has a two-fold task here :

— on the one hand to train personnel in the in Ministry itsel which is essential for the efficient running of the Ecole National (Arabisation) ;

— on the other hand to train the middle and higher technic and adminiatrative grades in all branches of economic and soci activity.

TRAINING AND MOROCCANISATION AS REGARDS PERSONNEL OF THE MINISTRY OF EDUCATION

I.— Primary education

I. — Training

The Ministry has made a considerable effort :

	Trained bilingual teachers	Monolingual	Total
1959 - 1960	79	510	589
1960 - 1961	110	590	700
1961 - 1962	681	1.276	1.957
1962 - 1963	752	1.718	2.470
1963 - 1964	1.215	1.005 + 500 scholarship holders	2.720
	2.837	5.599	8.436

Under the arabisation scheme in primary education prio has been given to training Arabic speakers (5599 monolingual of 8436 primary teachers).

a) Regional schools

The number of regional schools has increased considerably over the five-year period :

- October 1959 13
- October 1963 .... 28 training schools for primary teachers, distributed as follows :

- **22 schools** at Agadir, Kasba-Tadla, Casablanca G, Casablanca F, Settat, Fez Ain Kaddous, Fez Dar Mahraz, Fez Girls, Marrakesh, Safi, Meknes 2, Ksar-es-Souk, Ouida, Nador, Rabat G, Rabat F, Kenitra, Sidi Kacem, Tetuan G, Tetuan F, Tangier.

  (see Appendices I, II and III).
- **2 establishments** taking pupil-teachers on strength in normal sectors : Berkane, Al Hoceima.
- **4 Establishments** taking scholarship-holding pupil-teachers in normal sectors : Larache, Ksar-el-Kebir, Khouribga, El Jadida.

b) Refresher courses

Alongside this training scheme refresher courses have been organised for beginners who have been recruited without professional training or with insufficient qualifications :

- Lectures followed by a demonstration class ;
- Practical courses ;
- Preparation by correspondence for the examination leading to the "certificat d'aptitude pédagogique" (C.A.P.) ;
- Démonstration classes broadcast by Moroccan Radio ;
- Refresher courses in Arabic language, arithmetic and science have been held for two years in the evenings in all areas ;
- The number of inspectors and assistant-inspectors rose from 93 in October 1959 to 182 in October 1962.

c) Educational courses

In order to improve teachers' qualification the Ministry has organised educational and training courses, study tours, international exchanges etc. at home and abroad.

These courses and tours are intended for inspectors, principals young teachers etc.

Moroccanisation

Administrative staff (principals)

From 1959 onwards only Moroccans can be principals.

— In 1957 there were 683 primary schools headed by foreigners ;

— In 1962 there were only 293.

b) Teaching Staff (primary school teachers)

Under the moroccanisation programme 2837 bilingual teachers were trained in order to replace foreigners teaching French.

In 1959, out of 12,485 posts, 9044 were held by Moroccans and 3441 by foreigners.

In 1963-64, out of 24,835 teachers, there were 22,405 Moroccans, that is 90 % of the whole, and 2430 foreigners.

In October 1964 there were only 1845 foreigner teachers.

II. — Secondary education

Training

The Five Year Plan gave priority to the training of primary teachers. Nevertheless training for secondary education was not neglected. The Institut Pédagogique for secondary teachers became the Ecole Normale Supérieure, with two sections :

— Training of teachers for the second cycle - 3 years of study.

— Training of teachers for the first cycle - 2 years of study.

⁂

Aims of the Three Year Plan

The problem of teaching in primary schools will be dealt with mainly in chapter VIII — Primary Education — Social action.

I. — SPREAD OF EDUCATION

During the three year period the rate of admission of 40 % will be maintained.

Consequently figures for the period will be as follows :

— October 1964	60,000
— October 1965	63,500
— October 1966	66,000
— October 1967	67,500

2° Higher education

If we take into account the numbers forecast for final classes, and if we suppose that an average of 50 % pass their "baccalauréat" examination, figures for higher education will rise to :

— October 1965	1500
— October 1966	2000
— October 1967	2200
	5700

If we take into account students who have no "baccalauréat" but only a "capacité" or a "diplôme", we can put the numbers for higher education at 6000 for the three year period.

II. — ARABISATION

1° Secondary education

- History and geography will gradually come to be taught in Arabic.
- Text-books in Arabic will be brought out and teachers will be trained able to teach all subjects in Arabic.

2° Higher education

The arabisation process which has begun in the Faculty of Law will be continued.

The Arabisation Centre, which was set up and developed during the three year period has already achieved a great deal : dictionaries, glossaries, text-books etc.

The Centre will carry on its task of preparing text-books in the following subjetc : mathematics, physics, chemistry - which will make for arabisation in scientific subjects in secondary education.

III. — UNIFICATION

For secondary school teaching, as for higher education, the Three Year Plan will continue the policy of unification. This policy also includes a new approach to private education, which will be encourabed and given more freedom in order to lessen the burden on the State.

IV. — MOROCCANISATION AND TRAINING

1° Primary teachers :

a) Pupil-teachers :

— **recruitment :**

During the three-year period teachers will only be recruited to the extent of available posts (departure, moroccanisation, postings, death, seconding etc.), that is to say about 1800 posts.

— **further training :**

During the Three Year Plan teachers already at work will receive further training in order to improve their qualifications and thus the general level of teaching in the primary schools.

Thus training policy in primary education will still be based on quality.

This form of training will be made possible by abolishing preparatory courses (which free teachers) and by the creation of "écoles communales".

Number of teachers available during the three-year period :

— number of teachers in 1964-65 :

27,223	26,148	teaching staff
	1,075	principals

— number of available teachers :

3875 teaching staff.

1290 pupils of the E.R.I. (Regional Teacher Training Schools).

Training plan for primary school teachers :

— 1000 teachers will do a year's further training ;

— 2000 teachers will do a 2 year's further training.

The 1290 pupils of the Regional Schools will do two years instead of one.

The remainder, about 875, those who cannot benefit from further training, will be transferred to other sectors.

b) **Training of inspectors :**

There will be about a hundred new inspectors under the Three Year Plan.

c) **Rural teachers :**

October 1964 : Posting of the first batch of rural teachers (50) from the Regional School at Mechra bel Ksiri.

This E.R.I. intends :

- to train teachers for rural primary schools in Morocco ;
- to demonstrate practical teaching methods for rural schools ;
- experiment with new text-books and teaching material ;
- draw up programmes for educational research specially adapted to the environment ;
- hold seminars in order to complete the instruction of teachers who are beginners.

Plan for the training of rural primary school teachers :

October 1964	50
October 1965	90
October 1966	90
October 1967	90

Morocco is essentially an agricultural country and most pupil-teachers posted to rural areas after leaving the E.R.I. will be expected to leave their mark on the district where they serve. It has therefore been thought necessary to give them some idea of agriculture in theory and practice, rudimentary to begin with but more specialised in the future, in order to enable them to settle down in a rural atmosphere.

Moroccanisation

Primary education will be completely moroccanised during the three-year period. The 1845 posts still held by foreigners will be replaced by Moroccans.

2° Secondary education :

One of the essential aims of the Three Year Plan is the training of staff for secondary schools.

I. — Requirements during the three-year period

— 1965-66 .... **1527** posts to be made available
— 1966-67 1688
— 1967-68 1493

These post will be distributed as follows :

— 1965-66 .... 1527 (382 technical
(1145 general

— 1966-67 .... 1688 (422 technical
(1266 general.

— 1967-68 .... 1493 (374 technical
(1119 general.

II. — Plan for the training in secondary education

a) Teachers for general education :

- how to détermine the number of "bacheliers" (holders of "baccalauréat") likely to train as teachers :
- supposing that 50 % of candidates pass the "baccalauréat" and that only half take up secondary teaching and that a certain number of posts are filled by competitive examination or by recruiting holders of the French equivalent,
  the numbers are likely to be as follows :

Year	Modern		Traditional and private		Total
	lit.	sci.	lit.	sci.	
Oct. 1965	340	185	250	25	800
1966	403	217	350	30	1.000
1967	453	307	300	40	1.100
					2.900

Therefore : The following will the figures for those entering teaching carreers in secondary education :

1965-66	800	pupil-teachers
1966-67	1000	» »
1967-68	1110	» »

b) Technical teachers :

A great effort will be made to train spectalist teachers in the first cycle. During the three-year period it is pupils obtaining a technical diploma or "baccalauréat économique" who will have to be steered towards technical education.

Year	Commerce	Industry	Economics	Total
1965	48	26	5	79
1966	62	31	12	105
1967	91	43	15	149
				333

c) Teachers in agriculture :

There will be considerable increase in staff in the agricultural sectors during the period.

We must therefore train teachers from the first cycle in agriculture so that they can teach technical subjects during the two specialised years.

Hence : In October 1965 we must set up a preparatory section for training in agriculture :

October 1965	recruitment of 50 candidates ("baccalauréat" level)
October 1966	50
October 1967	50

Thus the batch turned out in October 1965 will be able to take over in agricultural colleges in October 1967.

III. — Organisation of training centres for teachers

a) Teachers of the second cycle :

- — general teaching : Ecole Normale Supérieure, Rabat ;
- — technical : training of technical teachers (accounting, management, draughtsmanship, technical and applied sciences) at the Central National de l'Enseignement Technique in Paris.

b) **Teachers of the first cycle** (priority) :

- secondary and technical teaching : widely decentralised ;
  - training and further training of primary teachers during the three-year period requires 5000 vacancies in the Ecoles Régionales ;
- the total capacity of these is 7500 ;
- since training of secondary school teachers will become a priority during the period and since there are 2500 vacant places in the E.R.I., the latter will become I.P.E.S. or I.P.E.T. :

in Rabat, Casablanca Tetuan Marrakesh Fès and Meknes	since these towns are culturally highly developed

- technical education :

  From October 1964 sections of teachers will be active in :

  - the Lycée Omar Khayyam, Rabat (commerce, accounting, secretarial) ;
  - the lycée Al Khansa, Casablanca, (women teachers of domestic science, dressmaking, social studies) ;
  - Ecoles des Cadres Hassan II, Aïn Sebaa (industrial technique, general engineering, electricity, draughtsmanship etc.) ;
- physical education :
  - October 1964 - Preparatory sections in a boys' lycée at Marrakesh and at the Lycée de Jeunes Filles, Casablanca ;
  - October 1966 - Candidates ("baccalauréat" level) will enter the Ecole Normale. Physical Education Section at the Bellevue National Centre.

This section will train first cycle teachers in two years and second cycle teachers in three years.

Pupil-teachers taking up posts during the three-year period :

— Second cycle teachers :

October 1964	54
October 1965	57
October 1966	313
October 1967	100 (priority to be given to first cycle)

— First cycle teachers :

October 1965	57
October 1965	138
October 1966	300
October 1967	600

N.B. : As from October 1964 priority will be given to training first cycle teachers (2/3 of recruitment).

Trained teachers and requirements

Year	Requirements	Trained teachers
1964	874	111
1965	1132	195
1966	1480	613
1967	1665	700

Numbers of staff working at the beginning of the Three Year Plan (by nationality) :

— Secondary — foreign languages : 2965
239 Moroccan
2726 forejgn
— Arabic : 1095 Moroccans
67 foreigners
— Total : 2793 foreigners

— Technical education :

— Foreigners : 112
414 MTM
— Moroccans : 1
362 MTM

The Ministry will thus be hard put to it to meet the requirements of secondary education for Moroccan teachers during the period.

The consequences of the effort made by the Ministry in secondary teacher training will only be felt after October 1967.

At the same time administrative training will continue : training of inspectors, career officers, principals etc.

Correspondence courses, courses at the Ministry etc. will be organised.

3) Technical and administrative training

Economists no longer consider all education beyond primary as a luxury for the élite.

The classroom is a production unit in economic growth or an investment in men.

Secondary education is therefore an aim in itself tied up with the economic, social and cultural requirements of the country.

Hence: The importance assigned to technical education, which provides medium-grade staff.

I. — Staff trained by the M.6.N. available on the labour market

a) Medium-grade staff

— Holders of the C.E.T. and C.E.S. (average of 50% passes in the examinations) (i.e.S Technical certificate and Secondary certificate).

— Industrial C.E.T.	June 1965	1135
	1966	1223
	1967	1350
— Agricultural C.E.T.	1965	1350
	1966	240
	1967	443
— Commercial C.E.T.	1965	390
	1966	500
	1967	724
— Women's C.E.T.	1965	190
	1966	103
	1967	152
— C.E.S.	1965	3460
	1966	3470
	1967	4614

When we consider that the administrative sectors are becoming saturated, we should contemplate a reconversion during the three-year period:

— **to the agricultural sector** (see appendix I).

— **to tourism.**

— The hotel business = 2 years theoretical in the establishments of the Ministry of Education with courses in hotels.

1965-66:

These sections will function at :

Casablanca	2 classes (80 pupils)
Rabat	1 class (40)
Marrakesh	1 class (40)
Tangier	1 class (40)
Fez	1 class (40)
	i.e 240 pupils

1966-67:

Marrakesh	1 section of 30 pupils
Fez	1 section
Tangier	1 section
Casablanca	2 sections
	i.e 150 pupils

1967-68:

Marrakesh	1 section of 30 pupils
Tangier	1 section
Casablanca	1 section
	i.e 90 pupils

The Hotel School in Rabat would become an Institute for top-grade staff.

From October 1964 two sections with 30 pupils could be set up at Casablanca and Rabat.

b) **Specialised staff**

Holders of technician's diploma to be orientated towards the public sector.

Year	Commerce	Industrial	Economic	Total
1965	48	26	5	79
1966	62	31	12	105
1967	91	43	15	149
				333

c) **Higher staff**

— Holders of "baccalaureat"

1965	600
1966	900
1967	1000

— Mohammedia Engineering School

	Public Works	Mechanical	Electricity	Mines
1 A	common pool = 90 pupils			
2 A	20	16	30	21
3 A	14	12	21	15
4 A	9	5	15	13

Year	Engineers passing out	Pupil engineers
1964	34	90
1965	42	90
1966	62	90
1967	87	90

REQUIREMENTS

The diagram for public education is shown in appendix VI.

SECONDARY EDUCATION

I. — REMINDER OF FIVE-YEAR PLAN OBJECTIVES

Secondary education conditions the expansion of primary education since it ensures the training of teachers, and the expansion of higher education since it provides students and the expansion of the economy in general since it provides medium technical and administrative staffs.

Hence:

Its importance and its priority.

2) Character of secondary education

As opposed to primary education it is selective. This selection depends on the aptitude of pupils (scholarships etc.).

The development of this sector of education should correspond to economic expansion. (requirements of the country).

Hence:

The priority to be given to technical and agricultural teaching. Admission to secondary schooling of 40% of pupils sitting for the entrance exam.

This percentage is a maximum which we cannot exceed during the three-year period. Morocco is well in advance here over other African countries since the Addis Ababa Conference set the rate at 30% for 1980

3) Structure of secondary education during the three year plan

The observation class is the first year = common pool. Afterwards pupils are streered towards a prolonged or a medium course. 40% to the former and 60% to the latter.

Medium course

2 years specialised teaching leading to the C.E.T.

Percentages will be as follows:

General	40 %
Agricultural	30 %
Industrial	15 %
Commercial	10 %
Social (women)	5 %

Prolonged course

Two cycles:

— **First cycle:** Two years in the common pool

Two years preparatory to the second cycle (CSE).

— **Second cycle** : Five sections preparaing for the baccalauréat

Traditional literary
Modern literary
Experimental science
Mathematical science
Economic science.

4) Priority for technical and agricultural education

A. — Technical education

a) importance attached to technical education

- — 60 % of pupils sent to technical education
- — Creation of three technicians' diplomas
- — 30 % of second cycle pupils to these diplomas.

b) Setting up of structures leading to the training of higher technicians etc.

Training of technicians

— Four years general study in the first cycle

— 3 years study in a technical section corresponding to the second cycle of secondary.

These studies will confer a technician's diploma including various choices: industrial, commercial, agricultural.

This staff will be trained in two or three special and well equipped lycées.

Training of qualified workers in urban industry or agricultural engineering.

— 2 years general study in the first cycle
— 2 years professional training conferring the C.E.T.
— For some trades an extra year of specialisation.

Professional training is carried beyond the two years of study in the first cycle so that pupils with a general education may:

- — Be observed and orientated accordingly
- — Be better prepared for effective specialisation
- — Be able to adapt themselves to the evolution of modern techniques.
- — Be conscious of their responsibilities.

c) Adaptation of technical education to the economic and social realities of the country.

The creation and orientation of the technical sections will take place in collaboration with the representatives of the branch in question:

A commission will be set up comprising:

— Representatives of the M.E.N. (suppliers)
—Representatives of the production section (users)
— Associations and unions (those utilised).

d) Revision of the school chart and the pattern of school establishments.

— Priority to the consolidation of existing establishments
— Regrouping of under-occupied establishments
— Planning of equipment with a view to making full use of material
— Decentralisation of technical education by the construction of colleges in rural centres
— Periodical adaptation of the structure of establishments according to economic requirements.
— Abolition of non-priority technical sections.

e) Improvement of recruitment in establishments for technical education.

— Orientation to this form of teaching of children with practical minds.

f) Encouragement of technical vocations for the best elements by offering promotion.

g) Determination of a policy of employment.

All pupils in technical education must be offered employment. Special legislation will be needed here.

B. — **Feminine or social education**

— Girls' education is slower than boys' but is now catching up and raises the question of employment of girls and their professional training.

Girls must therefore be prepared for suitable tasks.

- Teachers
- Nurses, child welfare, dressmaking, sewing, hairdressing, housekeeping etc.

C. — **Agricultural education:**

— Creation of a prolonged agricultural course.

We have thus defined a new technical training policy more adapted to the country's needs which will allow for a more ratoinal training of qualified staff and medium grades.

Physical education and school sport

A great effort will be made during the period to develop school sport:

- Training staff
- Equipment stadiums etc.
- Increase of one hour a week
- Two half-days fcr sport instead of one.

II. — TECHNICAL STUDY OF THE SECONDARY PYRAMID

1° **Education provided**

— The attached tables show the evolution of the provision of education during the period.

a) **Method of calculating the school pyramid**

To determine the numbers ond the distribution of pupils the following data are needed:

— The number admitted to secondary school each year:

	Public modern	Traditional and private
October 1964	50,000	8000
1965	51,000	10,500
1966	53,000	11,000
1967	54,500	11,000

N.B. — 200 should be added who enter the sixth form each year.

— Pattern of secondary education
— Intermediate course
— Prolonged course

Intermediate course:

— Numbers .... 60 % admitted to secondary

— Distribution by sections

40 %	General
30 %	Agricultural
15 %	Industrial
10 %	Commercial
5 %	Social (women)

Prolonged course

— Numbers .... 40 % admitted

— Numbers for the second cycle

55 % of those in the first cycle
(20 % giving up and 25 % repeating)

October 1964	3426
1965	4800
19696	4820
1967	6400

— Distribution by sections in the second cycle:

Baccalauréat	Traditional literary	7 %
	Modern literary	35 %
	Exp. science	18 %
	Math. science	8 %
	Econ. science	4 %
Diploma	Technical (ind.)	10 %
	Technical (comm.)	15 %
	Technical (agr.)	

— Intermediate cycle: See pyramid for medium education

— Long cycle: Baccalauréat sections — see pyramids

Diploma sections

	1965		1966		1967	
Tech. comm.	R	A	R	A	R	A
4 T C	5 %	25 %	5 %	20 %	5 %	20 %
5 T C	5 %	15 %	5 %	10 %	5 %	10 %
6 T C	15 %		15 %		15 %	
Tech. Ind.						
4 T 1	5 %	30 %	5 %	25 %	5 %	25 %
5 T 1	5 %	10 %	5 %	10 %	5 %	10 %
6 T 1	20 %		20 %		20 %	
Tech. Agr.						
4 T A	5 %	25 %	5 %	20 %	5 %	25 %
5 T A			5 %	10 %	5 %	10 %
6 T A						

b) Education provided

1964-65	165,404
1965-66	203,594
1966-67	241,499
1967-68	276,384

2° Requirements for teachers

a) Basis for calculation

Multiply the number of courses by the coefficient obtained by dividing the weekly timetable of one class by the service of a teacher:

i.e: 1.5 for observation classes, the first year of the common pool and for general prolonged courses.

(class timetable: 30 hrs. — teacher's timetable: 20 hrs.)

1.7 in technical sections

(class = 40 hrs : teacher = 23 hrs.)

To determine the number of lessons: the number of pupils divided by the numbers of one class:

40 pupils in C.O., first A.S, first A.G, first A.N.
40 pupils in the first year of the common pool as from Oct. 1965.
38 pupils in second A.S., second A.G, second A.N.
35 pupils in third A.S, third A.G, third A.N and first year of technical sections in Oct. 1964.
30 pupils in second and third year of technical sections

b) **Requirements for teachers**

Oct. 1964	829
1965	1527
1966	1688
1967	1493

c) **Determination of administrative posts**

This is worked out from: the regulations for primary and secondary.

— About 15% of the teaching posts to be created.

October 1965	638
1966	645
1967	660

3° Requirements for buildings

a) **Basis for calculation**

It is assumed that where premises are used without interruption for 8 hrs. of lessons in each of the five workings weeks, the number of buildings equals 3/4 of the number of lessons.

The classrooms to be built must be finished by 1st. October of the school year. Thus in 1963-64 650 classrooms were built which were needed for 1st. October 1964, the 610 for Oct. 1965 must be built in 1964-65 and so on....

b) **Requirements**

October 1964	650
1965	610
19966	800
1967	698

HIGHER EDUCATION

I. — REMINDER OF THREE YEAR PLAN OBJECTIVES

Aim of higher education:

Two conceptions:

— Traditional
— Modern

a) Traditional

There is a range of knowledge from which the student freely chooses under the classic system of Faculties. The University thus essentially provides higher culture in the field of literature, arts, science and technical studies.

b) Modern

Higher education is an instrument of the State and students should be steered according to the country's needs. Scholarships should also be awarded on this basis.

In a developing country higher education has a definite aim:

— General training and technical training of higher staff and further education.
— Teacher training.
— Training of reseach personnel.

If we consider that one of the three aims under the Three Year Plan is the training of personnel, it would be foolish to neglect the university which is the natural supplier. Thus priority will be given to the Higher Schools with regard to the traditional Faculties and a new spirit will be created.

It is impossible to conceive of a university unadapted to national development. The organisation of the Faculties should be more flexible. The present division into Faculties and the watertight branches should disappear. Team-work is required, direct relations between students and teachers, seminars etc.

The university must not be a world apart but in direct touch with the outside world, especially with the sectors of the economy. Thus we need:

Courses for students in business and industry.

Participation by technicians in the work of the university.

Some engineers could work part time in the university.

The practical knowledge of the technicians would be useful and higher education could expand by easing the burden on the teaching staff.

II. — TECHNICAL STUDIES: HIGHER EDUCATION PYRAMID

1° **Evolution of numbers during the period**

To determine the number of "bacheliers"

— 50% of the probable numbers in the higher forms:

October 1965	1500 more
1966	2000
1967	2200

If we take into account the number of students "non-bacheliers" admitted to certain classes ("capacité", classical Arabic diploma etc.) we may suppose that the incease in numbers during the period will amount to 6000 in higher education.

— Distribution of students in educational areas:

— present situation:	science	36%
	other fields	64%
— aim of the Plan:	science	50%
	other fields	50%

2° **Staff requirements**

a) **Basis of calculation:**

There are two elements:

— The number of students entering higher education during the period.

say 6000 students

— proportion of students to teacher:

Say 1-15.

b) Staff requirements

400 new teachers as follows:

1965	123
1966	130
1967	147

3° Building requirements

Higher education in Faculties, Institutes etd. will develop during the period according to the increase in "bacheliers". The Ministry will steer students to higher studies likely to help economic development — Science rather than Law for example.

During the period the following projects are contemplated:

- — Extension of the Ecole Normale Supérieure
- — Development of the Faculty of Medicine
- — Extension of the Faculty of Science
- — Construction of a wing for Girls.

EQUIPMENT PROGRAMME

I. — THEORETICAL BUILDING REQUIREMENTS

1) Theoretical building requirements :

1965	610 class rooms
1966	800 class rooms
1967	698 class rooms
	2108

2) Building which can be completed in the period :

- — 21 schools with 30 classrooms = 630 ;
- — 430 technical classes (ind., comm. etc.) ;
- — 500 classes for general education.

Construction of 21 standardized multi-purpose establishments

To be determined according to present teaching conditions and probable development.

a) Organisation of premises :

The average unit is still 30-40 pupils (2nd. cycle) and 40-45 (1st. cycle).

With a diversity of groups there must be a flexible organisation of premises, allowing for regroupment of area available and of equipment.

b) Methods :

Taking into account the economic and social conditions in Morocco, the formula adopted consists in multi-purpose buildings with standard structure and equipment, meeting the needs of boarding- or day school by manipulating the partititions.

The average dimensions will be 25 m. × 15 m.

This will be small enough to adapt itself to an overall establishment and to autonomous units.

Such buildings will :

— avoid multiplication of building plans ;

— facilitate price and quality control ;

Should help towards rationalisation and finally industrialisation of the building trade.

The structures will be standardized and divided into sections of 7.50 m. × 2.50 m., common divisor of the most usual building. i.e on the basis of an average group of 40 pupils or a dormitory section containing 15 beds.

This section is big enough for the rational use of concrete which is the type of material at present preferred in Morocco and small enough to allow for variety.

Description and cost estimate :

1. — Description :

A secondary school (1st. and 2nd. cycle) is calculated for 1200 pupils and includes a boarding school for 180.

The day school has 30 classrooms for general education in three building of ten classes and six specialised classes.

The boarding school includes 6 dormitories with sanitary equipment, dining-rooms, kitchens etc.

The lay-out is as usual :

— Administrative : Waiting-room, offices etc. ;

— Teaching : Common Room, Library etc. There will be four lodgings for senior staff as well as a porter's lodge.

Land required will be 40,000 m2 to allow for recreation and playingfields.

2. — Cost estimate :

— Based on June 1963 prices for 30 classes :

— **Buildings :**

Day-school	780,000 DH
Boarding school	600,000 DH
Services	260,000 DH
	1,630,000 DH

— **Works :**

Fencing	32,000 DH
Soil	63,000 DH
Connections	122,000 DH
	278,000 DH

Building	1,918,000 DH
Contingencies	192,000 DH
Cost price	2,100,000 DH

Purchase of land equipment (material and furnishing)

	1,430,000 DH
Total cost	3,530,000 DH

3. — Lay-out :

The table below shows the lay-out of 22 establishments corresponding to a total capacity of 30 classes for general education.

The programme will have the following characteristics :

— It is adapted to the standard unit of 10 general education classes. A school will therefore consist of 10, 20, 30 or 40 general education classes. Technical, industrial and agricultural classes will be added to classroom building. The construction of each establishment is spread out over several yearly instalments to follow the trend of local requirements ;

— to justify the extent of each yearly instalment to be built, we have calculated a growth index for secondary education, both general and technical. This index is based on the numbers at present in the primary cycle, expressed in extra classes (40 per class) for one year as opposed to another.

— Whatever the growth index we have never provided for more than 40 general education classes for a single establishment. Beyond this a school is difficult to manage.

— Most establishements are multi-purpose, specialised education predominating.

⁂

LOCALITE	Tranche 1966	Tranche 1967	Tranche 1968	Capacité totale	OBSERVATIONS
AGADIR	10	10	10	30	Lycée d'enseignement général avec internat. Le lycée actuel sera transformé en lycée technique et scientifique (installations déjà existantes)
BENI MELLAL .	20	20		40	Lycée polyvalent. Enseignement général et section industrielle. Internat.
KHOURIBGA ..	20	10		30	Lycée d'enseignement général, internat. L'actuel lycée devenant un lycée technique.
SETTAT	10	10		20	Collège agricole. Primitivement prévu à Sidi Bennour a été ramené à Settat à la demande des autorités locales. Vocation élevage.
TAZA	20	10	10	40	Lycée d'enseignement général, internat.
SEFROU	10	10	10	30	Lycée d'enseignement général, internat.
MARRAKECH .	20	20		40	Lycée de filles polyvalent section féminine - internat.
SAFI	20	20		40	Lycée d'enseignement général avec section commerciale, internat.
KSAR-ES-SOUK.	10	10	10	30	Lycée polyvalent - Section industrielle - Internat.
NADOR	10	10	10	30	Lycée d'enseignement général sans internat.
KENITRA	20	20		40	Lycée d'enseignement général - Internat.

LOCALITE	Tranche 1966	Tranche 1967	Tranche 1968	Capacite totale	OBSERVATIONS
OUEZZANE	10	10	10	30	Lycée d'enseignement général - Internat - Section commerciale - Enseignement moyen.
SIDI SLIMANE .	10	10		20	Collège agricole - Enseignement moyen - Internat.
AOUAMRA	10			10	Collège agricole - Enseignement moyen - Internat.
MIDELT		10		10	Collège technique - Section industrielle et section commerciale (moyen) - Internat.
MEKNES	10	10	20	40	Lycée enseignement général - Internat.
TETOUAN		10	20	30	Lycée technique - Section industrielle - Section commerciale (moyen) - Internat.
CASABLANCA .	10	10	20	40	Lycée enseignement général - Internat.
FES		10	20	30	Lycée technique - section industrielle - section commerciale (long et moyen) - Internat.
OUJDA		10	20	30	Lycée enseignement général - Internat.
TAROUDANT ..	10	10		20	Collège agricole - Enseignement moyen - Internat.
TOTAL ...	230	240	160	630	

TOTAL COSTS FOR 21 ESTABLISHMENTS

Type of investment :

— Civil engineering	44,100,000 DH
— Land and equipment	30,030,000 DH
	74,130,000 DH

GLOSSARY

"enseignement général" = general education.
"internat" = boarding-school.
"polyvalent" = teaching several subjects.
"vocation élevage" = emphasis on stock-breeding.
"moyen" = medium.

Technical classes

a) Rate of construction :

1965	130 classes
1966	160 classes
1967	140 classes
	430 classes

b) Cost of a fully-equipped class : 30,000 DH.

c) Total cost of 430 classes : 30,000 × 430 = 12,900,000 DH.

d) Lay-out :

New lycées at : Ouarzazate, Agadir, Beni Mellal, Khouribga, Marrakesh, Sefrou, Taza, Safi, Casablanca, Ouezzane, Fez, Azrou, Berkane.

Agricultural sections : Aïn Leuh, Aïn Zhora, Rommani, Ahermou, Aouamra, Taroudant.

These credits (building and above all equipment) are essential for the extension of technical education.

They will, in particular, allow for :

- the development of agricultural education ;
- restoration of unsuitable and worn-out material ;
- the reconversion of some establishments ;
- the adaptation of technical education to the needs of the modern world ;
- the equipment of the majority of colleges which are former "cours complémentaires" and which have not been in any way improved.

Thus these crédits will be distributed according to Plan priorities.

Distribution of credits :

Agricultural education	50 %
Industrial education	25 %
Commercial education	15 %
Social education	10 %

Break-down of credits according to priorities :

— To be distributed : 12,900,000 DH.

Agricultural education	6,450,000 DH
Industrial	3,225,000 DH
Commercial	1,935,000 DH
Social	1,290,000 DH

N.B. — Credits for technical education have been calculated on the basis of fully-equipped classes.

It is understood that building credits can be dissociated from equipment credits according to the circumstances.

General education classes

a) Rate of building :

1965	270 classes
1966	130 classes
1967	100 classes
	500 classes

b) Cost of one class : 20,000 DH.

c) Total for 500 classes : 20,000 DH × 500 = 10,000,000 DH.

d) Lay-out :

Casablanca, Fez, Beni Mellal, Mohammedia, El Jadida, Oued Zem, Berrechid, Ben Ahmed, Boujad, Sefrou, Safi, Ouarzazate, Marrakesh, Midelt, Meknes, Moulay Idris, Khenifra, Oujda, Nador, Ahfir, Sidi Yahia, Khemisset Souk-el-Arbaa, Sale, Rabat, Tangier, Al Hoceima.

Purchase of land : 90,000,000 DH.

RECAPITULATION - THREE YEAR PLAN INVESTMENT

A. — Secondary (in thousands of DH)

TYPE	1965-1966	1966-1967	1967-1968	TOTAL
Standard establishments and general education	22.710	24.910	22.280	69.900

NOTE. — Achievement of the whole programme represents expenditure amounting to 106,000,000 DH, but a considerable proportion of standardised establishments will not be in operation until October 1968. Thus a credit of about 36,100,000 DH will only be used over the period 1968-69, outside the Plan, and is only shown as authorised expenditure.

B. — Technical education

(in thousands of DH)

TYPE	1965-1966	1966-1967	1967-1968	TOTAL
Equipment etc. of technical classes	3.900	4.800	4.200	12.900

II. — HIGHER EDUCATION

— Work to be done - Building programme

a) "Grandes Ecoles" :

— Ecole Normale Supérieure
extension and decentralisation by creation of "Instituts Pédagogiques" for secondary and technical education.

— Ecole Mohammadia d'Ingénieurs
completion ; housing, parking.

— Faculty of Medicine - Dental School - Pharmaceutical School.

b) Faculties :

— Science
completion of amphitheatre - outer wall.

c) Social work at University

— extension of Cité Universitaire by creation of a wing for Girls. Description of wing : 200 rooms.

The whole comprises :

— one building 56,50 × 15.50 at five levels.

— basement :

1 flat ;
1 porter's room ;
1porter's lodge ;
boiler-room, store-room, transformer.

— Ground-floor : 28 rooms with shower, WC for blocks.

— 1, 2, 3, 4th. floors : 28 rooms with shower and WC for blocks.

— one building 9220 × 860 with three levels comprising :

   — ground-floor : courtyard, foyer and reading-room. 8 rooms with showers, 2 collective WC,s.

   — 1, 2 3rd. floors : 24 rooms with showers and 3 WC blocks per level.

— equipment for creation of a medical and social centre and sports equipments.

Distribution of investments over the period

1965-66 :

— Ecole Mohammadia	649,800 DH
— Science Faculty	
completion of amphitheatre	745,000 DH
outer wall	120,000 DH
— Girls' wing	1,500,000 DH
(first instalment of work)	
	3,014,800 DH

1966-67 :

— Estimates for Faculty of Medicine	1,500,000 DH
— Completion Girls' wing	1,000,000 DH
— Medical, sports etc.	100,000 DH
	2,600,000 DH

1967-68 :

— Estimates for Faculty of Medicine	1,500,000 DH
— Equipment Girl's wing	750,000 DH
— Medical, sports etc	100,000 DH
	2,350,000 DH

GRAND TOTAL FOR PLAN PERIOD	**7,964,800 DH**

N.B. :

1) As regards construction and equipment of the Ecole Normale Supérieure the share of the Moroccan Government will amount to 2,880,000 DH. Compensation will be effected by making over two Ecoles Régionales, i.e about 2,600,000 DH.
2) For the Faculty of Medicine an extension is being made to the Avicenna Hospital, including extra beds, amphiteatres, demonstration rooms etc.

No new instalment will be embarked upon until examination of the project has shown the availability of teaching staff, running costs and expenditure compared with the present system of scholarships abroad.

THREE YEAR PLAN 1965-67

CAPTER III

TRAINING PROGRAMME

SECTION II

SPECIALISED EDUCATION

SPECIALISED EDUCATION

- Training of teachers and instructors
- Agricultural education
- Professional training
- The hotel business
- Military schools

Training of teachers and instructors

I. — Regional schools for primary teachers :

This problem has already been dealt with in the preceding section.

The Three Year Plan does not contemplate further expenditure but in 1965 there will be a consolidation of credits needed to compete current building - 2 million DH.

II. — Training of primary teachers :

The Ministry of Labour and Social Questions takes charge of this. 60 teachers are being trained at the "Institut National de Formation des Cadres Techniques" at Casablanca (INFT).

Recruitment of instructors :

From its inception the INFCT has trained more than 200 instructors for professional training. Only about 70 have remained as instructors. In a single year the Casablanca-Mohammedia section lost 5 instructors from an electricity section attracted by better jobs. **The lack of instructors is at present the main brake on professional training.** Even for projects receiving foreign assistance it is extremely difficult to get together Moroccan opposite numbers to carry out the project. In this connection it will be important to settle urgently the status and pay of instructors, especially those from the Institute.

The Three Year Plan :

Installation of the INFCT at Casablanca is in process of completion. The following credits will be needed :

1965	1800
1966	625
Total	2425

III. Recapitulation and cost of investment (in thousands of DH)

	1965	1966	1967	TOTAL
— Completion ERI	2.000	—	—	2.000
— Completion INFCT	1.800	625	—	2.425
— Total :	3.800	625	—	4.425

Agricultural education

- Instruction at the Ministry of Education
- Instruction at the Ministry of Agriculture.

Training at the Ministry of Education

Morocco is an essential agricultural country (60 % of the active population). Expressed in terms of sectors the population can be distributed as follows :

— Agricultural sector (for males alone the figure is 60 %)	57 %
— Industrial sector	11 %
— Tertiary sector (transport, services, commerce)	19 %
— Vague activities	4 %
— Unemployed	9 %

Characteristics of Moroccan agriculture :

Two sectors :

- traditional ;
- and modern.

The traditional sector :

Features :

- large number of lots cultivated (1 million) ;
- small area of lots ;
- rudimentary methods ;
- the importance of auto-consumption.

The modern sector :

The are 7000 farms covering an approximate area of 700,000 hectares or about 1/8 of land cultivated.

- A dynamic sector entirely intended for the export market.
- Modern methods of farming.

HENCE : The importance of agricultural education and its priority in the Three Year Plan.

AGRICULTURAL EDUCATION :

I. — The Five Year Plan :

Agricultural education has not developed. Why ?

- lack of rational organisation ;
- lack of co-ordination between the two ministries which provide it : the Ministry of Education and the Ministry of Agriculture.

Consequences :

- lack of primary education in rural districts ;
- lack of a prolonged agricultural education ;
- lack of a Higher School (Planning engineers) ;
- limited possibilities for specialisation ;
- insufficient number of establishment and poor equipment ;
- multiplicity of diplomas which causes social injustice.

In short :

- lack of united action.

STATE OF AGRICUTURAL EDUCATION AT THE END OF THE FIVE YEAR PLAN

- **Ministry of Education :**
  - 12 medium-grade agricultural colleges ;
  - preparatory classes for the "Grandes Ecoles" at the Lycée Moulay Youssef ;
  - preparation of technical teachers (assistants) at Aïn Sebaa ;
  - training of rural primary teachers at Mechra bel Ksiri.
- **Ministry of Agriculture :**
  - 4 agricultural schools ;
  - forestry school ;
  - 7 training centres dependent on the ONMR ;
  - "Ecole Supérieure d'Agriculture " at Meknes ;
  - agricultural education for adults.

II. — Expansion for agricultural education during the Three Year Plan :

— Ministry of Education :

Under this heading there are three types of education :

A. — Primary education

This will be developed to improve social conditions in rural areas.

Expansion plans :

- October 1964 :
  - introduction of rural education in 42 primary schools ;
  - introduction of rural education in all ERI.
- October 1965 :
  - introduction of rural education in fifty extra primary schools.
- October 1966 :
  - gradual extension of rural education in all rural primary schools.
- October 1967 :
  - spread of such education to all rural primary schools.

Programmes :

- These will be orientated towards rural life :
  - experience of daily life ;
  - observation of the environment ;
  - study of local resources ;
  - small stock-breeding ;
  - practical agricultural work ;
  - carpentry and metal forging.
- For girls :
  - child welfare ;
  - personal and food hygiene ;
  - small stock-breeding.

Timetable :

- 3 hours per week.

Conclusion :

This education prepares for after school education or the real life of 50 % of the numbers in primary education.

B. — Secondary education

This is specialised education which should train the man, the citizen and the producer.

It is aimed not only at working the land but also at training men capable of taking responsibility, stepping up agricultural development and a comprehension of the problems of Moroccan economy.

It should therefore train the greatest possible number of qualified farmers and technicians which the sector requires.

HENCE : The importance attached to this expansion by the Plan (secondary education).

a) **Intermediate education** :

- the percentage of pupils orientated towards agricultural education will be brought up to 30 % of pupils reaching medium-grade education (60 % of pupils admitted to secondary school).
- development of medium-grade agricultural colleges : Bou Izakarn, Aouamra, Sidi Slimane, Taroudant, Sefrou, Aïn Leuh, Ahermoumou, Midelt, Aïn Zohra, Rommani, Sidi Bennour,

  i.e 11 colleges preparing for agricultural CET.

— **Outlets :**

- rural primary teachers' school at Mechra bel Ksiri ;
- entry to the specialised schools of the Ministry of Agriculture ;
- after one year of specialisation, training of instructors and advisers on methods (after school education and improvement of farming) ;
- grant of a single diploma : "adjoint technique agricole" ;
- entry to the real working world.

b) **Prolonged education** :

- the Three Year Plan will see the creation of a prolonged agricultural course leading to the diploma of "Technicien agricole" ;
- at this level technical training in the strict sense will be introduced (chemistry, agronomy, engineering etc.) ;
- this will provide specialised technicians in the various branches :

  stock-breeding ;
  irrigated land farming ;
  special farming.

Agricultural lycées :

- collège du Saïs at Fez ;

— collège Fqih ben Salah ;
— collège Im Ouam at Casablanca.

These colleges will become lycées.

Numbers anticipated :

— 1965	144
— 1966	175
— 1967	264

Entry to lycées :

— 3.5 - 4 % of pupils of the prolonged course orientated towards secondary education will go to agricultural lycées as well as the best pupils from agricultural colleges.

— **Outlets :**

- — entry to the Meknes agricultural school - training of works engineers ;
- — entry to the IPTA - training of teachers from agricultural secondary schools ;
- — entry into the working world - agricultural technicians.

C. — **Higher education :**

At the Lycée Moulay Youssef there will be a section preparing for the French higher agronomic schools (planning engineers) which will be open to holders of the Science Baccalauréat and Maths. Baccalauréat.

Remark :

— Agricultural education must be co-ordinated and unified by a single organisation.

⁂

Ministry of Agriculture

I. — SITUATION AT THE OUTSET OF THE THREE YEAR PLAN

a) Requirements of Moroccan agriculture for personnel and numbers available at the outset :

Since the agricultural sector has priority, the training of personnel is especially important.

1) Higher personnel :

Moroccanisation and development of agriculture requires the training of a large number of engineers (nearly 800).

2) Intermediate personnel :

— "adjoints techniques".

A large number of these is needed.

3) Basic personnel :

— contact officers, agricultural instructors ("moniteurs").
The requirements are :

— 1 moniteur per 500 farmers ;
or about 2000 moniteurs in the public sector alone ;

— present numbers are small.

b) Present possibilities for training personnel :

1) Higher personnel :

— the Meknes Agricultural School ;

— duration 3 years ;

— diploma required : Baccalauréat ;

— possibilities of training : 30 engineers per year ;

— 50 engineers approximately are trained in the "Grandes Ecoles" abroad.

2) Intermediate personnel :

— "Adjoints techniques" are trained in the technical schools of the Ministry of Agriculture.

— duration 2 years ;

— diploma required : agricultural BEPC or CAP ;
— possibilities of training : 175 per year.

c) Basic personnel

"Moniteurs" are trained in the training centres coming under the "Office de mise en valeur" (Agriculture Improvement Office).

II. — AIMS OF AGRICULTURAL TRAINING DURING THE THREE YEAR PLAN.

The three-year period will see a huge effort towards re-organisation, adaptation and control of agricultural training in the schools coming under both the Ministry of Education and the Ministry of Agriculture.

Ministry of Education

— definition of a rational policy for teaching and agricultural training, which will be noted for:

The creation of a complete course in Ministry of Education schools going from elementary education to higher education.

— Rural education	C.E.P.
— Intermediate education	C.A.P.
— Prolonged education	D.T.A.
— Schools preparing for the "Grandes Ecoles".	

Agriculture:

— Possibility of the creation of apprentice centres apart from training centres in order to perfect the training of rural C.E.P.

— Development of technical schools in order to improve or to specialise agricultural C.A.P.

— Re-organisation of the school at Meknes in order to increase its capacity.

TEHERFORE: The Three Year Plan will be dominated by a policy of agricultural training aiming at unification in, order to provide agricultural technicians.

At the same time the programme includes the creation of an Agronomic Institute. The French Government will pay for construction and equipment and Morocco will purchase the land and the cost of making it viable. Credits for this have already been granted.

A survey conducted by the Under-Secretary of State for Professional Training enables us to consider the principle of further investment which might comprise: (in thousands of DH)

	1965	1966	1967	TOTAL
Enlargement of the school at Souihla	470	—	—	470
Completion of Sidi Aïssa	600	—	—	600
School at Oujda	—	400	800	1.200
School at Beni Mellal	—	400	800	1.200
TOTAL	1.070	800	1.600	3.470

III. — RECAPITULATION OF INVESTMENTS

(thousands of dirhams)

	1965	1966	1967	TOTAL
Agronomic Institute	—	5.000	—	5.000
Provision for new establishments	1.070	800	1.600	3.470
TOTAL	1.070	5.800	1.600	8.470

N.B. : 1) The expenditure on the Agronomic Institute is not a charge on the Plan since it is an outside gift in kind.

2) The fund for new establishments can only be drawn on the recommendation of the Under-Secretary for Professional Training.

Professional training

I. — SPECIFIC TRAINING

This means training undertaken by some departments or organisations in order to meet their own requirements. This was the situation in September 1964:

Unit	No. of Centres	Total Numbers	Total passes	Type of training
Public health......	38	1.793	1.608	Nurses, technicians etc.
Public Works	11	443	267	Aeronautical, O.N.C.F. - O.N.E.
P.T.T.	1	256	256	P.T.T. staff (technical).
Agriculture	8	520	269	Engineers, Adjoints Techniques.
O.N.M.R.	5	407	245	Technicians.
Min. of Interior ..	3	202	129	Technicians signallers etc.
Civil Service......	2	186	105	Administrators, office staff.
Finance Ministry ..	1	70	30	Accountants.
Directorate of Planning	1	100	32	Statistical engineers.
Merchant Navy....	3	218	109	Officers and seamen.
Mines	2	80	20	Higher technicians and survey-ors.
Phosphates Office..	3	192	80	Technicians.
B.R.P.M.	1	13	13	Maintenance staff.
Total	79	4.480	3.163	

Most of these organisations already have sufficient accommodation to train staff they need and continue their training policy under the working budget. They are therefore mentioned as an indication.

Their system of professionnal training will be controlled by the Under-Secretariat for Professional Training.

On the other hand it is useful to study the requirements o organisations whose equipment must be completed during the three year period. At present an enquiry is being made and, to mee possible requirements, a lump sum of 200,000 DH has been se aside.

II. — TRAINING BY THE MINISTRY OF LABOUR AND SOCIAL QUESTIONS.

This training is intended for young people between 16 and 35 (in practice between 16 and 20). It enables those who have not continued their studies to have a normal apprenticeship and to learn a trade. At the same time it completes the work of technical education and aims at training rapidly a high-quality labour force according to demand.

Normal training takes 11 months in order to provide an "O.S." qualification in training centres. This qualification can be completed in centres for definite specialities.

a) The present situation

1) Numbers:

Hitherto, in default of a precise statement of requirements, the Ministry of Labour has concentrated its main effort on metallurgy and general mechanics, with the following figures for 1963-64:

	Gen. Mech.	Auto Mech.	Agr. Mech.	Elec.	Welding	Draughtsmanship	Total Pupils	Total Instructors
Theoretical numbers	570	315	40	355	315	60	1.655	155
Actual numbers	343	211	20	190	138	15	917	87

2) Existing establishments

In 1963-64 eight professional training centres were functioning and two qualification centres.

PUPILS		TEACHERS	
Possible	Actual	Needed	Actual number
1.655	917	155	87

Three centres are being completed at Larache, Nador and Safi.

We should also mention the Tailors' training schools. There are eight of them with the following numbers:

Rabat	Casa	Marrakesh	Meknes	Fez	Taza	Tangier	Nadòr	Total
41	58	44	31	32	53	59	21	339

(level C.E.P., recruitment at 16, three years' training, grant of complete "diplôme d'ouvrier" (D.O).

It is probable that these schools will disappear for lack of recruitment at 1st. year level, or they may be reconverted at a later date.

b) The three-year programme

In terms of the above situation priority objectives for the Three Year Plan are:

1) **As an absolute priority to improve the quality of present training and full use of equipment already existing or about to be provided.**

In this connection the principal aim of the programme is to achieve final completion of the INFCT in order to find the necessary competent instructors and to give them a status and a salary making for stability.

2) **Intensification of internal development**

In fact, as the Five Year proposed, internal development will be a rapid means of satisfying a large measure of the country's requirements, according to estimates; 20% of the requirements for higher personnel, 50% medium and 20% of qualified personnel.

3) Revision of the present system of professional training.

Especially in the field of existing structure and means, with a view to giving this form of training the necessary economic efficiency in liaison with undertakings whose assistance will enable us to achieve on a short-term basis the orientation desired.

These principles should not allow us to forget the necessity for professional training "on the job", which should be carried out essentially by active co-operation between the Ministry of Labour the private sector and the government departments in charge of such training.

The creation of a useful system of apprenticeship in this sense must therefore be actively pursued. The setting-up of an apprentice tax which would go towards a fund for training carried out jointly might be an effective method of co-operation between firms and the government.

Thus we could imitate certain most interesting activities initiated by some important firms.

4) Improvement of the labour exchange system

Recruitment of labour, qualified or not, has to go through the labour exchanges of the Ministry of Labour. If the system is to work properly we must assume better liaison between these offices and those looking for personnel. Legal obligation is not enough.

5) Completion of projects already begun

In order to ensure a sufficient volume of professional training it appears that we should allocate a certain sum in credits to projects under examination. The manner in which they are used can be determined later.

In its final form the Three Year Plan can be viewed as follows:

	Sums in thousands of DH			Total
	1965	1966	1967	
Extension of existing equipment (1)	500	1.250	1.250	3.000
Total	500	1.250	1.250	3.000

---

(1) Credits released on the basis of an enquiry to be made with priority regarding the equipment of the centre at Safi in 1965.

III. — TRAINING IN HANDICRAFTS

The equipment programme for handicrafts emphasises the place of handicrafts in Moroccan economy which is borne out by two figures, i.e: 250,000 artisans and a turn-over of 500 million DH.

Thus we must make an effort to help artisans to face the ever growing attack by industrial products and not only to maintain their position but, by renovation of their methods and production, to increase their share in the national income, expecially in view of the social implications.

To achieve this aim we must give priority to training artisans so as to enable them to produce better and in better conditions, especially by means of a sales network.

1) Present situation as regards means of training

Three sectors are involved:

— Textiles, leather-work and ceramics.

These are to be found as follows:

— Textiles: Tangier, Tetuan, Ouezzane, Chaouen, Meknes, Salé, Marrakesh.

— Leatherwork: Fez, Marrakesh, Meknes, Rabat, Tetuan.

The schools are mainly used by sons of artisans and numbers are on an average from 15 to 20 per centre — duration one year. At the moment the system is being regularised.

A certain number of new operations are at present being carried out, one of which will condition the effective training of artisans: i.e the creation of the Leather and Textile Institute at Fez, assisted by a special fund of the United Nations.

It has two main objectives:

a) Professional training for instructors and technical staff.

b) The improvement, development and orientation of production.

As regards professional training the Institute has a two-fold mission:

— To train instructors able to renovate the handicrafts industry by helping artisans to adapt themselves to new forms of production while at the same time preserving the stamp of Moroccan tradition.

— To train technical personnel who are familiar with modern methods and can help to integrate the handicrafts sector in a developing economy. Moreover this Institute must have apprentice centres enabling apprentices to get to know modern methods and equipment.

Apart from this three other operations are on foot:

— The creation of an apprentice centre for tanners at Beni Mellal with the assistance of the A.I.D (Beni Mellal will also be a research centre for the leather industry as a whole).

— The creation of a tanners' apprentice centre at Tetuan.

— The creation of an apprentice centre for cutting precious and semi-precious stones at Rabat (again with the help of A.I.D).

Other operations have been planned.

However, under present conditions, we must give the highest priority to a better definition of the system of apprenticeship to be adopted and to making full use of existing facilities.

2) The three year programme

This can be shown as follows:

	Sums in DIRHAMS		
	1965	1966	1967
Leather and Textile Institute at Fez :			
— Completion	50.000		
— Moroccan contribution	118.500		
— Ancillary centres	30.000		
Tannery, Beni Mellal :	30.000		
Precious stone centre in Rabat	50.000		
Other centres (1)............	161.500	400.000	300.000
Total	440.000	400.000	300.000

(1) The heading "other centres" concerns the spinning centre at Marrakesh, the textile centre at Ksar el Kebir and another at Tetuan.

Credits allocated will be used on the basis of the overall study of training programmes for trades and handicrafts the principle of which has been decided upon.

In particular the apprentice centre for precious stones will only be accepted if a study of the market shows it to be viable. Tables showing professional training in Morocco.

IV. — ESTABLISHMENTS COMING UNDER THE DEPARTMENT OF MINES, COMMERCE, INDUSTRY AND MERCHANT NAVY.

The present situation

Technical training given by this Ministry essentially affects personnel in the mining industry and maritime activities. Requirements for personnel for other industiral and commercial activities, which are by no means unimportant, are covered either by recruiting young men trained by the technical sections of the Ministry of ducation or, in the case of higher grades, by training abroard young men with scholarships or within the mining companies themselves, by training qualified workmen and staff through the training centres (mines, industry and the automobile industry) or by apprenticeship.

Requirements are known more or less exactly as regards the mining and maritime sectors, even as far as private firms are concerned. Now these sectors are precisely those which require sepcialised training which the establishments of the Ministry of Education cannot provide.

The plan is therefore mainly concerned with training the technical staff needed by these two sectors, either for administrative duties or for public organisations and private firms.

A. — THE MINING SECTOR

1) Requirements

A table shows the requirements in respect of Moroccanisation and mining technique, also those connected with the increase in the activity of this sector and the expansion of ministerial departments.

	SECTEUR PUBLIC			Secteur privé	Total général
	Administration	Organismes publics	Total		
Cadres Supérieurs Techniques					
Ingénieurs des Mines	11	33	44	148	192
Géologues	34	9	43	23	66
Chimistes	7	5	12	13	25
Electriciens	—	11	11	21	32
Divers	7	20	27	22	49
Géologues-adjoints	8	6	14	8	22
Maîtrise et Techniciens					
Maîtrise-mineurs et Contrôleurs des Mines	8	43	51	66	117
Techniciens de laverie	1	9	10	18	28
Techniciens géologues	4	7	18	13	21
Techniciens de laboratoires	3	10	13	16	29
Géomètres	—	50	50	21	71
Dessinateurs	6	26	32	18	50
Comptables qualifiés	2	26	28	64	92
Chefs de poste	—	85	85	42	127
Surveillants mineurs	—	—	—	24	24
Ouvriers qualifiés et professionnels :	Ouvrier qualif.	Ouvrier Prof. I	Ouvrier Prof. II	Ouvrier H.C.	Total
Mécaniciens d'entretien	9	14	10	5	36
Fraiseurs	—	—	1	1	2
Ajusteurs	1	—	4	4	9
Tourneurs	1	2	3	5	11
Monteurs d'installation	5	—	2	3	10
Electromécaniciens	4	2	10	2	18
Tôliers	—	—	1	—	1
Soudeurs chaudronnier	4	1	6	5	16
Bobineurs	—	—	1	—	1
Electriciens	—	1	2	1	4
Diésélistes	1	1	1	4	7
Forgerons	—	—	1	—	1

2) **Les possibilités de formation :**

	Moyen de formation	1964	1965	1966	Total	Restera à former
Cadres supérieurs techniques :						
	Etranger	9	8	8	25	132
Ingénieurs des Mines	Ecole Moham. .	5	13	17	35	
Géologues	Etranger	4	3	15	22	44
Chimistes	Etranger	4	6	22	32	—
Electriciens	Etranger	8	4	12	24	8
Divers	Etranger	2	4	7	13	36
Géologues-adjoints.	Ecole Mohammadia et Faculté de Rabat.	—	—	6	6	16
Maîtrise et techniciens :						
Maîtrise-mineurs, Contrôleurs des Mines	Ecole des Mines Rabat	8	15	15	38	79
Techniciens de laverie	»	—	2	2	4	24
Techniciens géologues	»	2	2	2	6	15
Techniciens de laboratoires	Lycée Al-Khaouarizmy	2	4	4	10	19
Géomètres des Mines	Ecole Touissit .	9	12	12	33	38
Chefs de Poste ...	Ecole de Touissit et Centre O.C.P.	8	18	32	58	69
Surveillants-mineurs	Ecole Touissit .	11	8	5	24	—
Dessinateurs	Lycée Al Laymoun	5	5	5	15	35
Comptables qualifiés	Centre de formation de comptables ...	5	5	5	15	77

GLOSSARY of terms possibly unfamiliar:

"restera à former" = remainder left to be trained

"dessinateurs" = draughtsmen

"comptables" = accountants

"mécaniciens d'entretien" = maintenance engineers

"fraiseurs" = millers (eng.)

Figures show a forecast of the training which can be supplied by the means at the disposal of the Mining and Geology Department. The problem of the training of maintenance staff by mining companies such as the Phosphates Office and the firm "Minas del Rif".

As regards the other mines it is intended to send 10-12 workmen each year to the centre at Fez controlled by the Ministry of Labour, a good example of co-ordination between two different departments.

At the same time certain technical posts are the object of a preparation course in Ministry of Education establishments: Laboratory technicians, industrial draughtsmen, accountants and all maintenance jobs. It is a matter of creating a liaison system between the source of demand and the supplier in order to increase the possibility of training and to avoid duplication.

As regards higher posts, electicians or assistant geologists, co-ordination has to be achieved with the Mohammedia engineering school and the Rabat Faculty of Science. Candidates must also be attracted by adequate publicity.

We may thus hope to lessen the gap between requirements and anticipated training facilities. A comparison of the figures for both show that in any case Moroccanisation cannot be completed at the end of the Three Year Plan.

3) Three year programme

— Mining School at Touissit

It is intended to train 9 specialists in electro-mechanics at this school by extending its facilities.

A credit of 10,000 DH may be granted for this purpose.

At the same time there must be liaison between mining enterprises and Ministry of Education establishments which train this categories of specialist.

— Mining school at Rabat

This school is to be transferred to a functional building. Since its activities and those of the Mohammedia Engineering School are complementary, it would be desirable to link them together on common ground in order to take advantage of some existing facilities. Construction on land already owned by the State would be thereby less costly. The mining fund for professional training is granting a subsidy of 200,000 DH and a 300,000 DH credit is to be allocated for 1965.

THE MINING RESEARCH AND INVESTMENT OFFICE (BRPM)

Apart from joint action with the Mining and Geology Department, the BRPM is interested in training two categories of staff:

1st. category: **Qualified personnel** (intermediate and minor)

In consideration of the special activity of the BRPM, the number of qualified employees needed for its work and the urgent nature of Moroccanisation, effort has been concentrated on : a) Sending young men abroad for specialised and advanced courses.

b) Study of the possibility of opening specialisation and adaptation centres within the BRPM itself. Thus a maintenance centre and a centre for training welders have been set up.

2nd category: **Workmen**

There are two categories of personnel to which the BRPM gives training comprising two grades:

a) The first is provided for the most gifted and experienced workmen. It is mainly a literacy course lasting 5 months.

b) The second grade is a course intended to "recycle" the best elements who have already completed the first grade and have shown themselves capable of improving their knowledge.

No investment is intended during the three-year period.

b) The maritime sector

1) Present situation

Taking its pupils either at the level of admission to secondary school or on leaving the second cycle, this sector trains apprentice seamen, officers and engineer officers and, by way of refresher courses, masters of merchant navy vessels and fishing vessels.

Establishments specialising in such training are the Merchant Navy Officers School in Casablanca and the Maritime Apprentice School at Safi and Agadir. Numbers are as follows:

— Officer School	27
— Apprentice School	150

2) Requirements for personnel

Two facts justify the demand for Moroccan personnel:

— The greater part of Moroccan imports and exports are carried under a foreign flag.

— The consumption of fish in Morocco could be increased tenfold, but fishing activities are more or less limited to coastal areas.

The policy of the Merchant Navy and Fishery Department is as follows:

— To develop Moroccan shipping in order not to be dependent on foreign shipping.

— To develop the consumption of fish which could improve the food situation at a cheap rate and thus to extend the high-seas tunny-fishing fleet.

To achieve these aims the following would be the requirements:

III. — THREE YEAR PROGRAMME

This is based on two observations:

— There is no maritime apprentice school north of Casablanca.

— The Merchant Navy Officers' School has no training-ship enabling pupils to pass from theoretical to practical training (Federal Germany has offered to pay half the price of such a vessel).

Therefore the programme intends:

— To set up a maritime apprentice school at Larache:

The land would be provided by the Ministry of PPblic Works. It would be situated in Larache harbour and the cost of building would be less.

Credit allocated: 1,002,000 DH over two years.

— To construct a training-ship based on Casablanca: credit 1,500,000 DH over two years.

Recapitulation

The table below shows the annual distribution of credits:

ESTABLISHMENT	(in thousands of DH)		
	1965	1966	1967
Mining school, Touissit	10.000		
Mining school, Rabat	300.000		
Larache Maritime School	200.000	420.000	400.000
Training-ship for Officers' School	600.000	600.000	300.000
Total	1.110.000	1.020.000	700.000

V. — ESTABLISHMENTS COMING UNDER THE MINISTRY OF YOUTH AND SPORTS

The Ministry has four main centres for professional training of its personnel:

1) The **"Centre National de Formation des Educateurs"** trains office staff for development of young men and boys as well as maladjusted youths. Its priority tasks are as follows: to train

— Educationalists, men and women, for young people in boarding schools

— Free surveillance

— Family visitors

— Educationalists for family education

— Educationalists for basic education, co-operative education and popular education.

It recruits among the staff of the Youth and Sports departmet, holders of the BEPC, CES or equivalent. Duration 3-9 months according to the speciality, followed by one year's practical course.

2) The **"Centre National d'Education Populaire"** chiefly trains:

— Staff specialising in popular culture

— Workers in the private sector responsible for popular culture.

NOTE : (1) There is an extra investment by the Mining Fund Professional Training Dept. amounting to 200,000 DH.

3) The **"Centre National de Promotion Féminine"**

— organises two types of course:

— Courses for elementary training reserved for women instructors ("monitrices") who will have to be recruited, level second year of secondary school.

— Specialised course for first and second grade (nurseries, co-operatives, rural work etc.).

At present there are 36 on courses. Since 1960 the Centre has trained 360 monitrices.

4) The **"Centre National des Sports"**

This has already received more than 400 young men and girls who have prepared for the "Brevet d'Aide-Moniteur" during 17 courses organised for a duration of six weeks each. 165 young men and 44 girls have obtained this diploma and act as substitutes or temporary moniteurs.

Since 1960 this training has been replaced by a training for moniteurs trained in one year courses. In the last three years 66 moniteurs and 10 monitrices have attended the courses, 51 young men and 10 girls having passed the examination.

In 1962-63 the experiment was tried of preparing the first part of the "Professorat" and the competitive exam. for entrance to the ENSEP with the backing of the Youth and Sports Department in Paris. 5 students followed the course.

In this connection we have to define the role of the "Centre National des Sports" with a view to co-ordinating physical education training with that of the Ministry of Education.

It has become an urgent matter to train staff for sport and education at levels higher than that of "moniteurs titulaires". The material assets of the Centre National and their teaching staff might be used to train specialists divided into two sections:

— A section of instructors in sport intended to help with the activities of "civilian sports groups" and to look after the Physical Education Centres or associations.

— A section of teachers of physical education intended to work in secondary establishments of the Ministry of Education.

Since these sections have a different task, each should have its own orientation within the whole. In particular future teachers should be trained more with a view to the education of all rather than of the specially gifted. Their own training should be undertaken in collaboration with the Ministry of Education.

This Ministry, which is a "user", should participate not only in the working out of programmes but also in the recruitment of pupils from the two sections by orientating the gifted elements in secondary school towards a training school. This orientation will be put into practice as from the beginning of the 1964 school year by creating preparatory sections in a boys' lycée in Marrakesh and in a girls' lycée in Casablanca.

The first batch will leave at the level of the Baccalauréat in 1966 to enter the Ecole Normale Supérieure, a section of the physical education department. This specialised section could in fact be located at the National Sports Centre and teachers from the Ecole Normale would give scientific and pedagogic courses. The "professeur" section would have to train secondary school teachers of the first cycle in two years and also teachers of the second cycle, as in the case of other subjects.

Three year programme

We must make maximum use of existing estabishmenlts.

No further investment is provided for under the Plan, since present facilities seem adequate.

VI. — ESTABLISHMENTS COMING UNDER THE CIVIL SERVICE DEPARTMENT (FONCTION PUBLIQUE)

Given the important role of the administration in national development, the smooth running of departments is essential for planning.

Parallel to the question of administrative structures there is the problem of civil servants and their qualifications.

The action required to produce efficiency will be carried on at two levels:

1) Higher personnel

The Ecole Marocaine d'Administration is preparing staff for central at the level of "rédacteur" (literally "editor" or "drafter").

This will now be completed by training allowing access to the grade of administrator. With twenty administrators taking their place each year as from 1965 the level of higher staff should be considerably improved by 1970.

As for medium-grade staff (administrative secretaries, clerks) no action is contemplated in the immediate future. That undertaken by the Ministry of the Interior has in fact been recently completed. In liaison with the Direction de la Fonction Publique the Secretary for Teihnical Education and the Secretary for Professional Training will have to determine the need for "recycling" and advancement of staff.

2) Medium-grade staff

The Office Workers Training Centre, created with the help of the I.L.O, has to train in a few months personnel whose output and efficiency will improve the administration.

We should consider the possibility of setting up an annex in Casablanca.

VII. — ESTABLISHMENTS COMING UNDER THE GENERAL DELEGATION OF THE "PROMOTION NATIONALE" AND PLANNING.

The P.M now has 100 pupils on courses made up of Moroccans and Africans.

As an indication here is the distribution:

	Moroccans	Foreigners (Africans)	Total
1st. Year	15	24	39
2nd. Year	9	20	29
3rd. Year	15	17	32

Candidates are recruited at intermediate level between the Maths. Baccalauréat and the "Licence de Sciences Economiquess et Mathématiques".

Moroccan pupils are recruited as civil servants, while the foreigners are U.N scholarship holders.

The study cycle lasts three years.

Three year programme

By agreements concluded between Morocco and the U.N Special Fund, an equipment credit of 715,000 DH is provided for in 1965.

VIII — ESTABLISHMENTS COMING UNDER THE MINISTRY OF THE INTERIOR

Professional training in this Ministry is mainly administrative. We should add to this the training given to some categories of municipal employees and signals staff.

1) Administrative training

This is concerned with.

a) Administrative secretaries

Their training is provided for by the Administrative Training Centre at Rabat-Agdal. They are recruited, after competitive selection, from among holders of the BEPC, the CESM or equivalent.

Training lasts 6 months. Until 1964 the centre was training 57 pupils.

b) Accountants

These are trained by provincial training centres at Agadir, Casablanca, Fez, Marrakesh, Meknes, Oujda, Rabat and Tangier.

Those who follow this course are clerks who already belong to the Ministry of the Interior.

Since their creation in March 1963 these centres have trained about 70 pupils.

a) Technical staff

This is intended for:

a) Technical staff in the Municipalities

This training is given by nine classes mainly functioning in Ministry of Education establishments in Rabat, Aïn Sebaa, Casablanca.

— One section at the "Ecole des Conducteurs de Chantiers des Travaux", site foremen. Present number 13.

— One section at the Fine Arts School, architectural designers. Training takes two years from BEPC or CES level.

— One section at the Horticultural School, Aïn Sebaa: technical staff and supervisors of planting. Technical staff are trained in one year at the level of third year secondary.

Present number 21. 23 are already trained. Planting supervisors are trained in two years and selected from the technical staff.

— Three sections at the Lycée Al Khaouarizmy, Casablanca. One trains site foremen in three years from CAP level. Present number 99. Already trained 51. The second trains technical staff for municipal works and draughtsmen in two years, chosen from among the technical staff. Present number 8. Already trained 47.

b) Signals service

This training is given in two classes at the Telecommunications Training Centre at Rabat-Agdal. One class trains RT operators and the other trains supervisors.

Operators are trained in six months from CEP level. Since 1957 350 have been trained.

Supervisors are recruited from the best pupils of the operator class. The course lasts two years. 16 were trained previously.

c) Fire Precaution staff

There is the "Centre d'Instruction de Protection contre l'Incendie" (CIPIR) in Rabat. It trains firemen by advanced courses for serving personnel. 1388 have already been trained.

d) Auxiliary Forces

The training school of the Inspection des Forces Auxiliaires trains unit commanders, accountants, mechanics and RT operators. 671 have already been trained.

Out of all Ministry of Interior centres 2391 pupils have been trained since 1960.

Three year programme

Maximum of existing facilities.

No further investments: situation adequate.

IX. — ESTABLISHMENTS COMING UNDER THE MINISTRY OF JUSTICE

I. — Registry personnel

These are trained at two levels:

a) The professional training centre opened in Rabat. Two sections (or classes) give instruction: one in Arabic and the other in French. About 300 have already been trained here.

b) The practical training centre for Clerks of the Court. There are three open at Casablanca, Fez and Marrakesh: one class per centre. About 150 pupils are following courses at the moment.

The recruitment of secretaries/Clerks of the Court takes place among holders of the CESM (for Arabic language) or BEPC (French language), or again among personnel who have three years service in the courts.

No conditions are made as regards the practical training centres.

The course lasts three months (full time) for training secretaries/ Clerks of the Court and eight months (four hours a week) for practice

II. — Judges

Judges are trained by the National Institute of Judicial Studies in Rabat. The course includes theoretical and practical lessons. It lasts two years. The level is that of "Licence en Droit" (law degree).

The number of judges studying at present is 44, 24 in the Arabic language section and 20 in the French section. They are recruited from among judges.

Three year programme

Same remarks as for preceding section.

XI. — ESTABLISHMENTS COMING UNDER THE FINANCE DEPARTMENT

The "Ecole Nationale des Finances" combines, from a material and technical point of view, various branches of training.

1) The Ecole Nationale :

The advances courses organised by the School are intended for the principal employees of all administrative departments in the Finance Dept. (3rd. Class level) or the higher level (baccalauréat) : inspectors or assistant inspectors.

The preparatory courses enable Ministry personnel to prepare for various examinations leading to the higher grades.

2) Ancillary activity :

The Ecole Nationale des Finances has been able to house, apart from its own courses :

— the Customs School ;

— the Accountants' Training Centre.

3) Other professional training organisations :

Outside the premises of the Ecole Nationale the following are organised :

— advanced and preparatory courses for competitive entry to the Trésorerie Générale in Rabat ;

— advanced courses for Customs personnel in Casablanca ;

— advanced courses for personnel in the "Régies Financières".

I. — Ecole Nationale des Finances

— Advanced courses :

Courses last about seven months (nine courses have been completed so far and each accommodates 30 pupils).

Courses are divided into two parts :

- — general training — morning ;
- — professional courses — afternoons — at the Ecole Nationale or in one of its departments:

Out of 250 auditors and administrative secretaries who have followed these courses :

- — 140 have become inspectors ;
- — 8 have been admitted to the Ecole Marocaine d'Administration ;
- — 10 have passed examinations in Law.

Apart from the 7-month advanced courses the Ecole des Finances organises directly each year :

- — a course preparing for the final examination for administrative secretaries : 5-10 pupils per course ;
- — a courses preparing for the examination for administrative secretaries : 40-50 pupils per course ;
- — a course preparing for the examination for assistant inspector of the Administration Centrale des Finances : about 20 pupils per course ;
- — accountancy courses lasting 5 weeks. This is mass training intended to affect 2000 auditors in the Finance Ministry or other ministries : about 45 per course.

II. — Ancillary training

1) Ecole des Domaines (Lands) :

Training for controllers and inspectors of Lands. Course parallel to the 7-months advanced course : 8-10 per course.

2) Financial Inspectors course :

Preparation for the final examination for Inspectors (level of "Licence en Droit") : 8-10 per course.

3) Accountants' Training Centre :

This, in two years, trains accountants for the semi-public sector. Level of recruitment (3rd. Class) : 40 pupils first year, 30 second year.

4) Classes organised at the Trésorerie Générale, Rabat :

These are aimed at :

Advanced training for the weaker elements and selection of the best. Numbers : about 120.

- preparation of clerks for the Finance Ministry. Numbers : 130;
- preparation for the examination for Treasury Comptroller. Numbers 29 ;
- preparation for the examination for "sous-chef du service du Trésor" (CEP level). Numbers 14 ;
- training of "Inspecteurs Principaux du Trésor" : level 1st. Class. Numbers : 30 per course.

XII. — ESTABLISHMENTS COMING UNDER THE MINISTRY OF POSTS AND TELEGRAPHS (PTT)

For the professional training of these employees the PTT has a Post and Telecommunications Centre In Rabat comprising 28 lecture-rooms.

More than 1500 pupils have been trained there during the last four years.

These pupils receive two main categories of courses : Working courses and technical courses.

a) Employees who have followed the working course will have to look after the working of postal and financial services, telephones and telegraphs.

b) Those following technical courses may be divided into three main categories :

- employees dealing with general services automatic, telegraph etc.) ;
- signals staff dealing with long distance, radio-electricity etc. ;
- employees dealing with underground and overhead lines.

The PTT Ministry trains employees which it recruits by competitive examination or on the basis of diplomas.

The duration of each course depends on the grade of the pupils or on the subject taught.

THREE YEAR PROGRAMME :

Same remarks as for preceding section.

XIII. — ESTABLISHMENTS COMING UNDER THE PUBLIC HEALTH MINISTRY

After devoting the first few years after independence to training numerous auxiliary employees, the Ministry is now reaching a stage at which there are better chances of recruting staff with the right degree of education. It is looking for a more highly qualified personnel whose task will be to recruit auxiliaries and gradually take over from foreigners who are becoming more and more difficult to recruit.

Professional training takes place at four levels. Thus the schools of the Ministry cans be classified in four divisions.

First degree schools :

These are intended to train auxiliary staff, especially in practical technique. There are 20 of them distributed over the main population centres. There are 1023 trainees. At présent these are recruited at 2nd. Year Secondary level.

Duration : one year. A passing-out certificate is given after examination.

Second degree schools :

At present there are 10 of these in the main centres. 541 pupils are being trained. They are to become qualified all-purpose orderlies.

Programmes and methods are planned to complete 1st. degree training. Duration : one year. Recruitment takes place after the first degree course, the exam. being competitive and also open to serving staff who have at least two years practice.

Third degree schools :

These are to train three categories :

a) Nursing staff with all-purpose State diplomas.

b) Specialised nursing staff holding a CAP certificate.

c) Technicians holding a diploma either in hygiene, re-education or health statistics.

These different categories are formed in the following schools :

a) These are five schools preparing for a State diploma, four of which recruit by competitive examination from among those pupils who have a certificate of final secondary studies. The fifth is open to nursing staff with diplomas and two years' practice.

b) The CAP schools number 15 and train in one or two years nursing staff with diplomas or those specialising in anaesthesia, reanimation etc.

c) There are four technical schools which prepare for a technical diploma. 20 pupils follow statistical courses, 102 hygiene and 30 re-education.

Cadre schools (4th. Degree) :

These prepare staff in the preceding category for a State diploma as Health Specialist (assistant).

In future the Ministry will concentrate its efforts on the two last categories.

REQUIREMENTS FOR 1965-66

Requirements for 1965-66 Total requirements	Health Asst.	A.D.S.	Aides	Technicians	Asst. Technicians
Hospitals	962	2.134	2.906		
Preventive medicine ..	900	3.433	4.121	279	639
Total 1965-67	1.862	5.567	7.027	279	639
Existing in 1964......	450	3.506	3.591		
To be trained or recruited	1.412	2.061	3.436	279	639

At the same time the Ministry will need during the three-year period 290 dictors, 20 pharmacists, 47 dentists, 199 sanitary engineers, 5 statisticians, 279 administrative staff, 2899 drivers and subordinate personnel.

Three Year Programme :

Same remarks as for preceding section.

XIV. — ESTABLISHMENTS COMING UNDER THE MINISTRY OR PUBLIC WORKS

The Ministry has various specialised centres :

I. — For training personnel for the aeronautical and meteorology Dept. :

a) **The Training Centre for Technicians in Civil Aviation and Meteorology** trains assistant technicians (1st. part of baccalauréat or 6th. year). It can receive 50 pupils as follows :

- 20 assistants technicians ;
- 20 technicians ;
- 10 technicians following a promotion course with grade of assistant technician.

b) **Aeronautical Mechanics' Training Centre :**

This trains ground staff.

c) **Telecommunications Training Centre :**

This can receive 48 pupils in four six-monthly periods :

- basic electricity ;
- basic electronics ;
- advanced electronics ;
- professional equipment.

d) **Navigation Training Centre :**

It can receive 30 pupils as follows :

- 10 assistants technicians ;
- 10 technicians ;
- 10 technicians for promotion course with grade of assistant.
- 10 technicians ;

II. — Training of site overseers public works :

a) **School for site overseers :**

Two sections each comprising 2 classes. Numbers as follows :

SECTION	CC 1	CC 2	Total
Site overseers	21	20	41
Draughtsmen	12	11	23

Recruitment is at BEPC or equivalent level. Training last one school year. 1956-63 it trained 320 pupils.

b) **Regional Centres for Public Works Personnel :**

At present there are seven of these. They train draughtsmen, technicians, accountants, typists and clerks. As regards these jobs (except technician) there must be co-ordination with the specialised sections of the Ministry of Education. At present there are 209 pupils in 19 groups.

III. — **Railway staff training :**

The Office National des Chemins de Fer (ONCF) trains staff for internal promotion. They concentrate on training "on the job" by means of courses lasting from one to six months.

IV. — **Electricity distribution : Training of staff :**

The National Electricity Office has three main lines of training :

a) **Newly recruited staff :**

This takes place at the Professional Training Centre where pupils are divided as follows :

- — electrician (workmen) section (promotion of 20 to 1st. cycle and 20 to 2nd. cycle) ;
- — higher Technician section (2 cycles comprising 20 pupils each).

b) **Advanced courses for personnel :**

These courses are practical and last from two to five months. They are to meet immediate needs and secure internal promotion in the department.

c) **Correspondence courses :**

The "Electricité France" company, by a professional training agreement, has placed itself at the disposal of all employees of the O.N.E. who wish to perfect their knowledge with the company or follow Professional Training and Technique classes.

The Ministry of Public Works sends about sixty pupils a year abroad to train for higher posts.

THREE YEAR PROGRAMME :

As for the preceding section.

XV. — PRIVATE FIRMS

Training organised by private firms affects all industrial sectors, as well as commerce and banking :

- — Oil companies ;
- — Metallurgical companies ;
- — Foodstuffs ;
- — Building.

These firms organise :

- — Technical courses ;
- — Industrial technology courses ;
- — Advanced courses of a general nature, in particular literacy courses.

They also offer their employees courses abroad and send their best workmen to France at the company's expense or with scholarships which they can in some cases obtain from the French Embassy.

As an indication the attached table shows the role of private firms as regards professional training.

Nevertheless it should be emphasised that, whereas the advanced courses and professional training have in general shown very good results, the literacy classes, which unfortunately interest the great mass of workmen, do not go farther than enabling pupils to grasp purely and simply the technical words used in their own section of the plant. Moreover it has been noted that workmen only attend irregularly and frequently give up.

TABLEAU ANNEXE

Entreprises	Activités du Service de Formation Professionnelle	Effectifs actuels	Recrutement	Années passées
C.O.S.U.M.A. .... Cie Sucrière Maroc. ...	— Alphabétisation de masse .. — Formation de cadres tech. .. — Recyclage	Non précisé 113 80	Agents du service	Renouv.
I.B.M.	— Formation de cadres techn. . (Personnel mécanographique)	Variables	Agents du service Tous niveaux	478
BULL .... Sté Marocaine des Machines	— Formation d'agents techn. .. (Opérateurs, vérificateurs)	Non précisé	Agents du service et auditeurs libres	171
BERLIET-MAROC	— Stage de perfectionnement technique	205	Toutes les branches (intérieures et extérieures à l'entreprise)	2.233
	— Alphabétisation	48	—	—
	— Stage de l'Ecole Berliet à Lyon	17	Niveau CET	112
L'AIR LIQUIDE	— Stage de première formation (Soudure, oxycoupage, etc.)	—	Toutes les candidatures s acceptées	236
ASSOCIATION DES Industries du Caoutchouc au Maroc	— Formation de cadres et agents maîtrise	Non précisé	—	—
	— Stages à l'étranger	—	—	—
	— Cours d'alphabétisation	—	—	—
	— Formation Professionnelle ..	—	—	—

Entreprises	Activités du Service de Formation Professionnelle	Effectifs actuels	Recrutement	Années passées
INDUSTRIE - COTONIERE au Maroc ...	— Cours de tissage, de dessin, d'instruction générale	Non précisé	Agents du service	102
Cie MAROCAINE des CARTONS et PAPIERS	— Cours d'alphabétisation .... — Cours de formation papetière	32 13	Ouvriers Agents du service (niveau CEP)	Non précisé
LA CELLULOSE du MAROC	— Alphabétisation de base .... — Etude de postes de fabricat.	Non précisé —	Ouvriers Ouvriers	160 280
ETABLISSEMENTS J. CARNAUD et BORGES DE BASSE-INDRE	— Cours d'instructions génér. .. — Cours d'alphabétisation ... — Stage au Centre de Formation Technique de NANTES	Non précisé — 4	Personnel du service — Agents de maîtrise	Non précisé — 11
Sté INDUSTRIELLE DES HUILES au MAROC	— Formation de base .... — Cours du soir du adultes ..	165 Non précisé	Enfants des ouvriers	Non précisé
Sté des PETROLES B.P. du MAROC	— Formation d'auxiliaires (chauffeurs, pompistes, aides magasiniers)	20	Ouvriers alphabètes	—
ESSO STANDARD MAROC S.A.	— Formation professionnelle .. — Alphabétisation	Non précisé	Agents du service	Non précisé
TOTAL .... (Cie Marocaine des carburants)	— Cours d'alphabétisation .... — Formation générale	Non précisé —	— —	Non précisé —
BUTAGAZ MAROC ..	— Stage professionnel	12	Agents du service	Non précisé

Entreprises	Activités du Service de Formation Professionnelle	Effectifs actuels	Recrutement	Années passées
LESIEUR AFRIQUE CASABLANCA	— Alphabétisation	18	Agents du service	Non précisé
	— Formation sur le tas	35	»	—
	— Stage de perfectionnement à l'étranger	6	»	—
CHAUX et CIMENTS .	— Alphabétisation	Non précisé	Agents du service	100
OMNIUM NORD AFRICAIN	— Alphabétisation	Non précisé		105
	— Formation technologique ..	—	Agents du service	150
	— Formation commerciale	—	—	10
	— Stages extérieurs	—	—	35
REGIE DES TABACS .	— Alphabétisation	130	Au sein du service	920
	— Stages (vérificateurs, entreposeurs...)	—	»	65
ASSOCIATION DES INDUSTRIES MINIERES DU MAROC	— Alphabétisation	309	Au sein du service	400
	— Formation sur place agents techniques	32	»	Non précisé
	— Formation extérieure	19	»	»
[illegible]IETE MINIERE ..	— Formation des mineurs	Non précisé	Au sein du service	192
	— Alphabétisation	—	»	110
	— Formation extérieure ...... (Cadres supérieurs)	—	»	8
Cie ROYALE	— Alphabétisation	—	Au sein du service	309
	— Formation sur place agents techniques	—	»	41
	— Formation extérieure	—	»	19

GLOSSARY

"EFFECTIFS ACTUELS" = PRESENT NUMBERS ATTENDING

"Alphabétisation" = literary courses

"Stage de perfectionnement" = advanced course

"Stage" in general = course

In the world of banking training is organised under the auspice of the "Organisation Professionnelle des Banques du Maroc".

- — one preliminary accelerated school giving training in si months to holder of the "brevet élémentaire" or CES ;
- — in the bank itself there is the first degree banking schoo intended for small clerks ;
- — the second degree course is reserved for employees havin already three years' training.

Moroccanisation in banks is now about 50 % and should soo reach 80 %.

Other Firms :

Numerous other firms have answered the questionnaire sen out by the "Centre d'Etudes et d'Informations Economiques et So ciales (Confédération Générale Economique Marocaine) at the re quest of the Professionnal Training Commission.

We have only quoted thos firms whose training scheme i extensive, although we should not ignore the efforts of smalle firms.

Since the number of persons trained is not always clearly sta ted it is impossible to give an overall figure. It must neverthele amount to several thousands.

About fifty firms answered the questionnaire saying that the were active in this field. They can be divided according to the typ or production as follows :

— Mining companies. These are members of the Association de Industries Minières au Maroc, including the Sherifian Phosphate Office which itself alone has a training budget of six million DH About ten firms have been able to offer training to 1900 work men over the last few years.

— Metallurgy	4	firm
— Chemical	4	»
— Automobile	3	»
— Public Works, building, etc.	6	»
— Fuel	5	»
— Paper, tobacco	5	»
— Electricity, electronics	3	»
— Textiles, shoes	2	»
— Foodstuffs	8	»
— Commerce, transport	5	»

— Banking : the banks have a technical training centre managed by the OPBM. Ihe number of banks taking part is not stated. Two banks answered privately.

TRAINING PROGRAMME :

No training programme has been laid down for the Three Year Plan. Each firm works for its own needs, except some groups such as mines and banks. No doubt co-ordination would give a better output for other sectors (e.g oil companies, the paper industry etc.).

Most firms say they are prepared to continue their professional training, since they still lack qualified workmen and feel the effect of the departure of foreign personnel, whom they would like to replace with Moroccans.

The government department concerned with professional training proposes to study, with the help of representatives of the various types of business, the possibility of co-ordinating efforts in the field of training between private firms and the public sector.

RECAPITULATION

PROFESSIONAL TRAINING

Amount of public investment 1965 - 67.

(in thousands of DH)

ESTABLISHMENT	1965	1966	1967	TOTAL
Specific training	200	200	200	600
Ministry of Labour.............	500	1.250	1.250	3.000
Handicrafts	440	400	300	1.140
Miners	10	—	—	10
Mining school	300	—	—	300
Maritime school	200	420	400	1.020
Training-ship	600	600	300	1.500
Statistical work	715	—	—	715
Totaux	2.965	2.870	2.450	8.285

PROFESSIONAL TRAINING

Description of existing establishments

	Date founded	PUPILS		TEACHERS	
		Potential numbers	Actual numbers	Potential numbers	Actual numbers
I.N.F.C.T.	1959	180	98	17	1
C.Q.P. Mohammedia.	1960	330	210	30	20
C.Q.P. Fez	1961	330	200	30	20
C.F.P. Maarif	1948	120	64	13	6
C.F.P. Sidi Bernoussi .	1961	135	63	13	5
C.F.P. Rabat	1943	145	138	14	12
C.F.P. Meknes	1948	40	40	3	3
C.F.P. Taza	1960	60	30	5	3
C.F.P. Al Hoceima ..	1960	45	25	4	2
C.F.P. Tangier	1960	135	88	13	10
C.F.P. Tetuan.......	1963	135	44	13	5
		1.655	917	155	87

a) The INFCT, Casablanca :

The Institute, which was recently transferred from Rabat, will, in the main :

1) provide, in a relatively short time public and private training establishments with the necessary teachers, in order to provide trained labour ;
2) Give active assistance to public and private enterprises with a view to systematic training of their specialised staff ;
3) Constitute an executive body for the evaluation and control of national training schemes.

About a hundred instructors, as well as 200 qualified workmen, will be trained yearly. Apart from this 200 medium-grade staff in industry will be given ordinary and advanced training within the firm.

The INFCT will thus be a kind of training laboratory for Morocco.

b) Centres de Qualification Professionnelle (CQP) :

1) the CQP at Mohammedia. It can take 330 workmen all highly qualified. Actual numbers : 210.

2) CQP Fez. It is equipped to train mechanics for agricultural machinery up to 330. Actual numbers : 200.

These two centres can house all their pupils.

a) **Centres de Formation Professionnelle (CFP) :**

1) CFP Casablanca. It can take 120 evening pupils. Present : 60 ;

2) CFP Sidi Bernoussi, Casablanca. Numbers provided for 135. Actual numbers : 63. Inadequatre premises and insufficient staff ;

3) The centre at Rabat. It is well equipped. Numbers provided for : 145. Actual numbers : 138. Good conditions. Housed in the former Institute ;

4) Meknes. Numbers provided for : 40. Actual numbers : 35. Very inadequatre premises. Only general mechanics ;

5) Taza. Numbers provided for : 60. Actual numbers : 30. General mechanics only ;

6) Al Hoceima. Numbers provided for 45. Actual numbers 25. Only two rather inadequate workshops and no arrangements for boarding. Plenty of equipment ;

7) Tangier. Numbers provided for : 135. Actual numbers : 38. Enlargements are planned. Well run ;

8) Tetuan. Numbers provided for : 135. Actual numbers : 44. Equipment work in progress.

Three other centres are being completed :

The first is at Larache where 120 workmen are distributed as follows :

— Timber work, carpentry	25
— General mechanics	50
— Engine-workers	25
— Sanitary plumbing	20

The second is at Nador where the postponed construction of an iron and steel plant raises the question of the kind of training to be given with a view to the future of the area.

The Hotel business

A special effort is to be made in this direction.

Training for hotel work will be profoundly modified in order to keep pace with the development of the tourist trade. It will be in the hands of the Ministry of Education.

A recent enquiry tried to ascertain the basic requirements for the normal running of a hotel.

For luxury hotels the figure for employment in proportion to rooms is 0.8. Since the Plan calls for 10,000 rooms 8000 employees will be needed.

In fact we can estimate that hotel training as such should reach 1/3 of total numbers (the remainder will be trained on the spot), i.e 2600 persons.

It is impossible to hope to reach this objective during the three-year period and, during that period, we must full use of those trained "on the job", keeping the following ideas in mind :

1) the apprentice must be bound to the employer to by contract, the latter undertaking to provide training.

For his part the apprentice undertakes to stay for a definite period.

2) within certain selected training centres (Tangier, Casablanca, Agadir, Rabat) hotel sections must be created and apprentices must be given the chance to attend them according to a timetable laid down in advance by agreement with employers ;

3) we must complete the process by arranging for international exchanges of trainees. This will mean that :

— young Morocans will be able to learn the trade and also foreign languages ;

— Moroccan hotel-keepers will be able to use foreign staff, while Moroccan apprentices are being trained.

But the three-year programme intends to create training schemes as such, under the following conditions :

Classes given by establishments already existing will be localised at Casablanca. Tangier, Marrakesh, Fez and Rabat and will give training over two years — one year theory and one practice.

The following numbers will thus be trained as from 1966 (the first batch will already be in service during the course beginning as from the end of the 1965 school year).

Number of pupils trained :

Casablanca	Fez	Marrakesh	Tangier	Rabat
80	40	40	40	40

This training scheme implies technical assistance from the departments concerned (The Tourist Office) especially as regards specialised teachers. The level will be that of CES.

Moreover an extra effort will be made calling for special equipment in certain establishments. This will be undertaken during 1965 with a view to opening at Casablanca, Marrakesh, Fez and Tangier sections holding about thirty pupils each.

The pupils, recruited at the same level as above, will receive at the same time theoretical and practical training which, completed by courses in hotels, will enable to provide Moroccan tourism with the staff it needs.

Finally, higher grades will be trained under the auspices of the Ministry of Education with the assistance of the Hotel School in Rabat for practical instruction. About a hundred posts can thus be filled from holders of the Baccalauréat each year.

A similar establishment will have to be set up in the Mediterranean area at Tangier or Al Hoceima to double the training of the higher grades.

Three Year Programme of Investment

1965	1,000,000
1966	1,000,000
1967	1,200,000

Military Schools

The Ministry of Defense gives professional training to its personnel in numerous centres and schools teaching different subjects at different levels.

I. — TRAINING ESTABLISHMENTS

1) **Royal Military Academy** (Meknes) :

This has to train officers to command platoons (moral, intellectual, physical and military qualities).

The course lasts three years. Admission is on the basis of the first part of the Baccalauréat or diploma in classical Arabic and by competitive examination at that level.

2) **Military Lycée at Kenitra :**

This gives general training up to Baccalauréat for future pupils of the Military Academy or, at 1st. cycle level, pupils of the Royal Naval School at Casablanca and the Pilots' School at Marrakesh.

3) **Royal Military Academy at Ahermoumou :**

This has to train N.C.O's able to command small units or to do administrative work.

The course lasts two years.

Admission is by competitive examination for pupils having completed second year of secondary school.

4) **Royal Gendarmerie School at Meknes :**

It has two aims :

a) To give general training to gendarmes ;

b) to give specialised training in definite subjects. It lasts one year.

5) **Signals School (Camp Moulay Ismaïl, Rabat) :**

This centre trains RT operators, teleprinter staff, and other technicians.

Admission by examination at CEP level.

6) Military Nrses' School

Located at the Hôpital Mohammed V. It admits pupils by competitive examination at the level of third year secondary. Duration two years.

It carries a " brevet élémentaire d'Infirmière militaire ".

7) Professional Instruction Centres :

These have to train different specialists for the armed forces. - Drivers - Break-down men - Accountants - Hospital orderlies - Bandmasters etc.

Recruitment is from among serving personnel.

8) Royal Naval School, Casablanca

This provides military and maritime training for young men destined for the various specialities in the Navy.

It recruits by competitive exam. at 5th. Class level and 2 nd. year secondary.

The course lasts eight months. Specialities include handling of ships, weapons and services.

9) Royal Pilots' School, Marrakesh

This trains pilots of light aircraft. Recruitment is by competitive exam. from among holders of the BEPC or CESM.

The course lasts one year. It carries a " brevet de pilote " 1st. degree.

Four batches of 30 pupils are taken on an average every year.

10) Armed Forces Sports Centre

This has to :

a) Train special cadres for Physical Training (sports officers, swimming instructors etc.)

b) Train military sports teams.

c) Train special units

d) Work on behalf of various organisations.

The duration of studies varies according to speciality :

a) Sports officers : 5 months ;

b) EPM instructors : 18 months ;

c) Assistants to latter : 1 year ;

d) Swimming instructors : 4 months.

Recruitment is by competitive examination at various levels :

— EPM and swimming instructors : 3rd. year secondary ;
— Assistant EPM instructors : 2nd year secondary ;
— Sports Officers and Chief Instructors : candidates are taken from serving personnel who have followed courses on military physical training (EPM) or those who have shown special aptitude.

Three year programme :

In view of the modernisation of the two chief cadre-forming establishments, the Academy at Meknes and the NCO's school at Ahermoumou, considerable equipment credits are requested by the Ministry of Defence.

The programmes originally contemplated would amount to : 4,385,920 DH for Meknes and 3,142,920 DH for Ahermoumou.

Owing to the financial limitations of the overall plan, this must be reduced to 2,200,000 DH distributed over the plan period as follows :

1965	1,000,000
1966	700,000
1967	500,000

How these credits are used depends on the priorities established by the training department of the Army.

SPECIALISED TRAINING

RECAPITULATION OF PUBLIC INVESTMENT

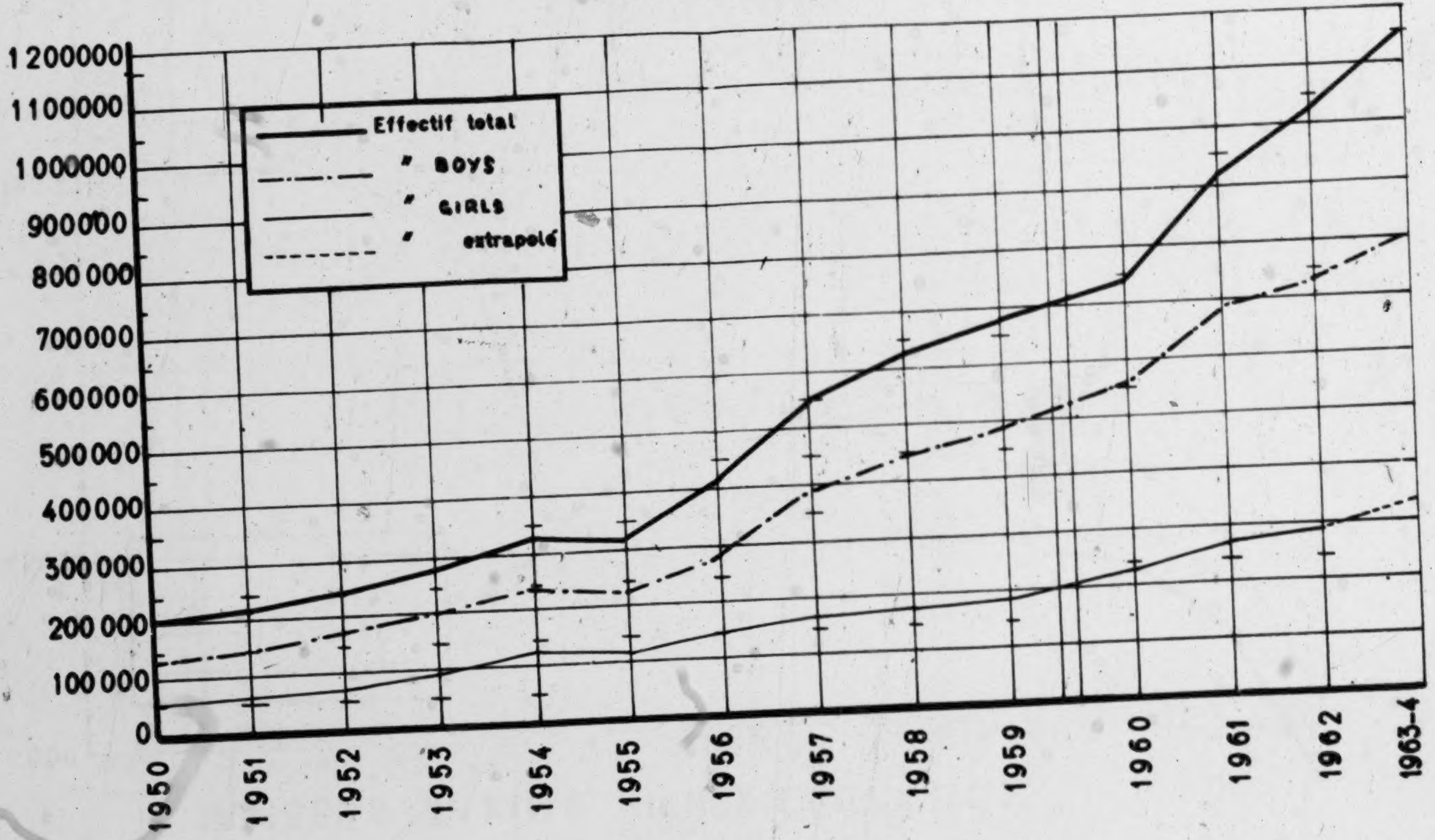
(Three Year Plan Period)

(In thousands of DH)

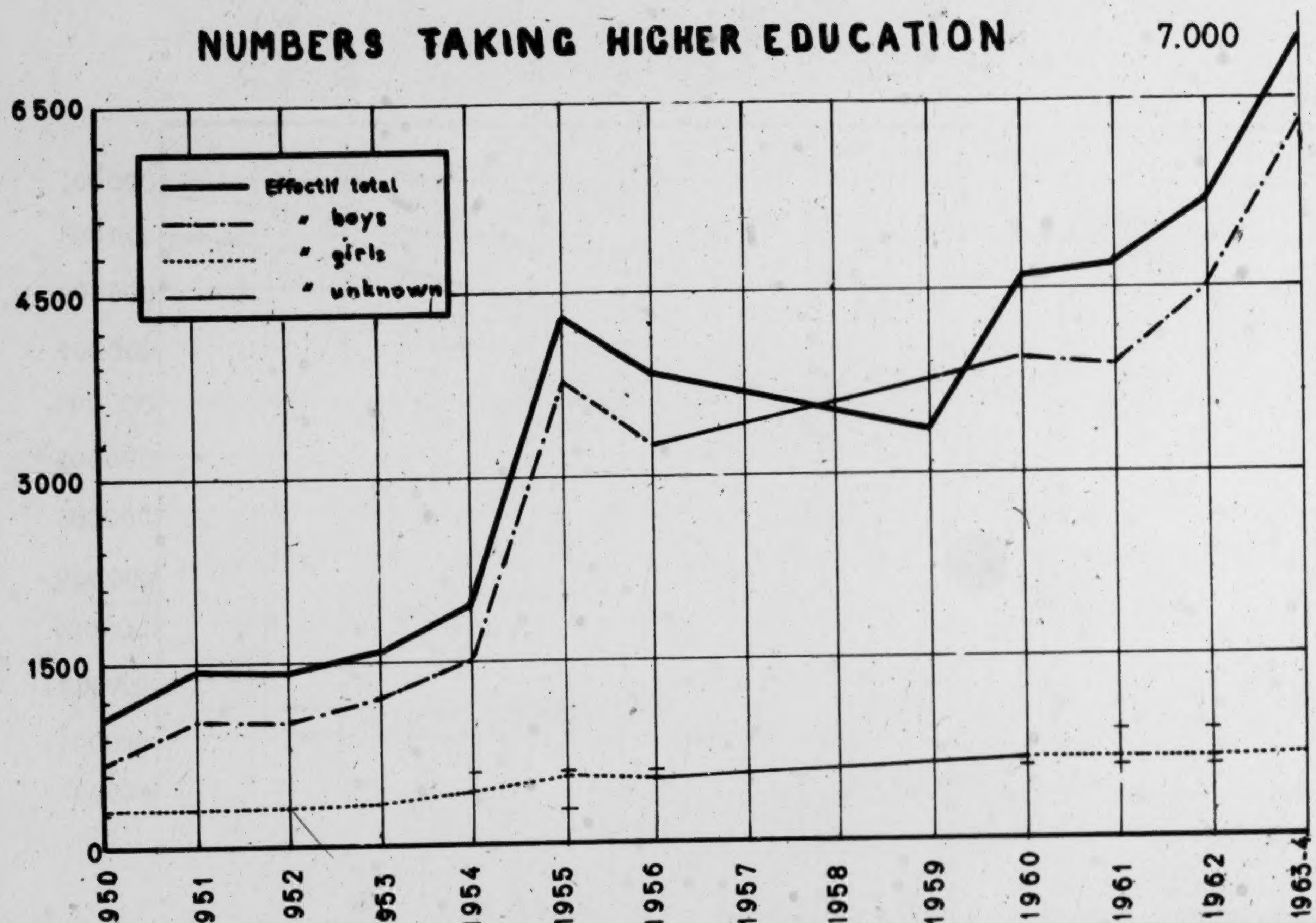
PROJECT	1965	1966	1967	TOTAL
1. - Training of teachers and instructors	3.800	625	—	4.425
2. - Agricultural training	1.070	5.800	1.600	8.470
3. - Professional training	2.865	2.870	2.450	8.185
4. - Hotel staff	1.000	1.000	1.200	3.200
5. - Military schools	1.000	700	500	2.200
TOTAUX	9.735	10.995	5.750	26.480

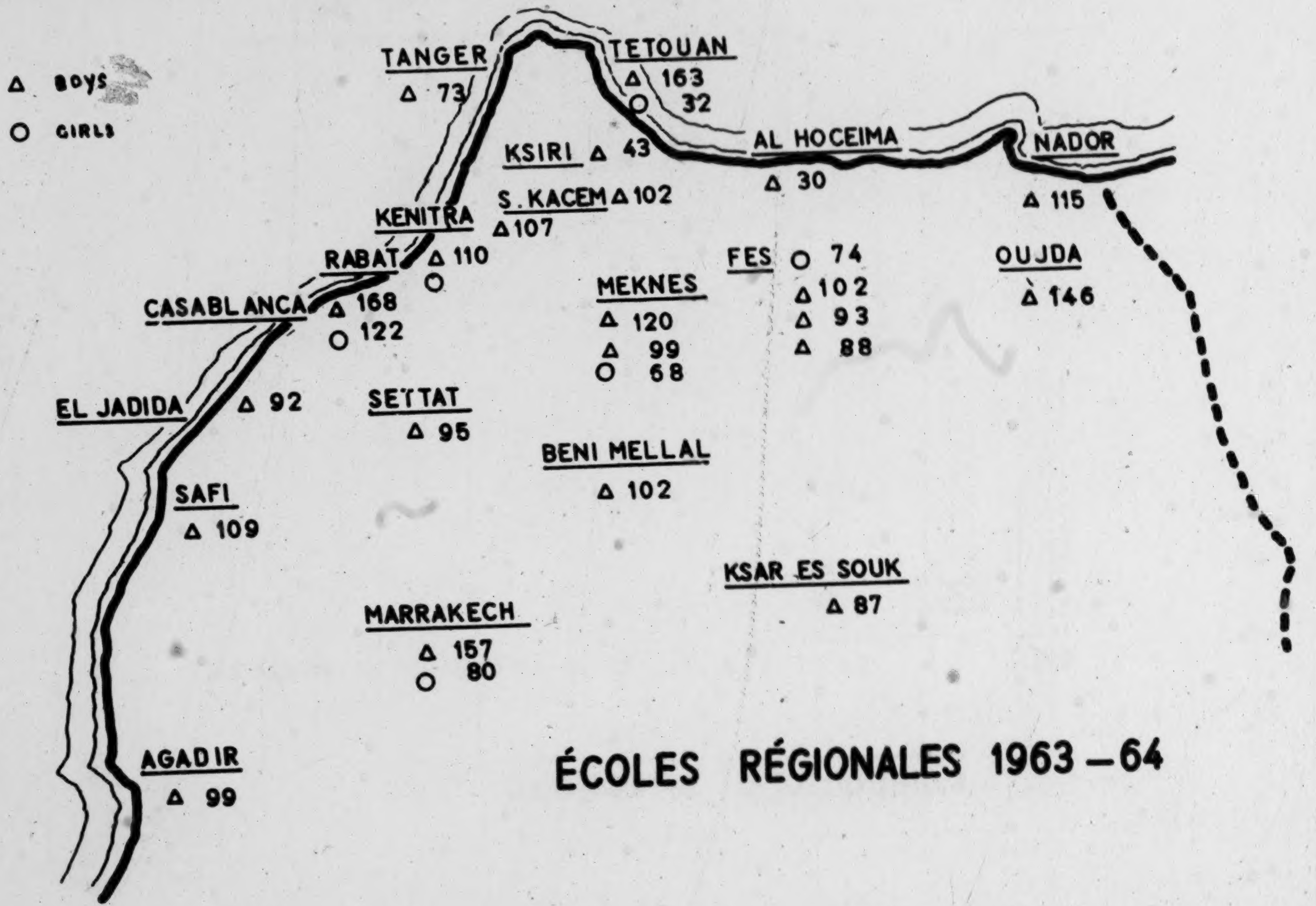
APPENDICES

NUMBERS TAKING PRIMARY EDUCATION



NUMBERS TAKING HIGHER EDUCATION



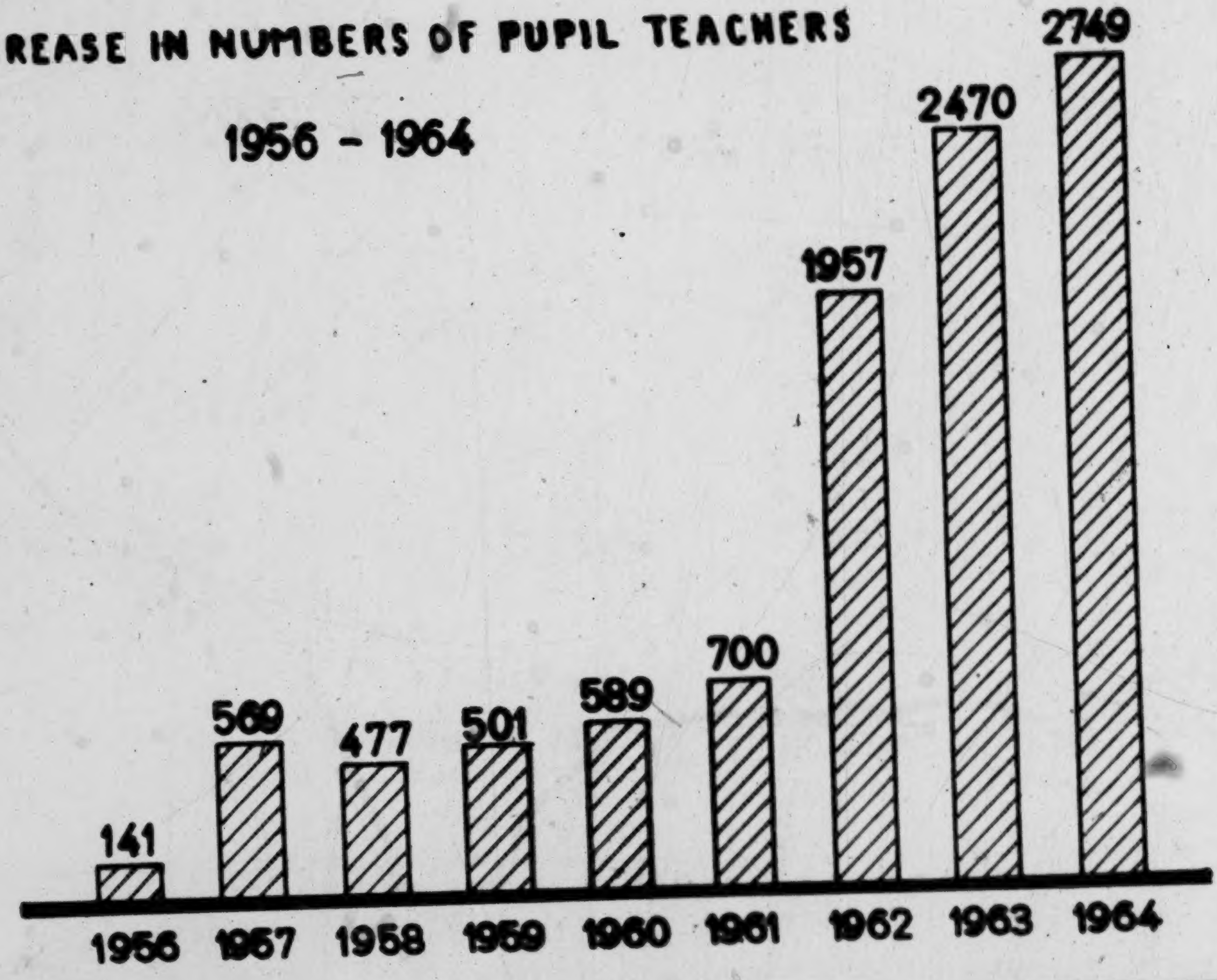

Δ BOYS
○ GIRLS
TANGER
Δ 73
TETOUAN
Δ 163
○ 32
KSIRI Δ 43
AL HOCEIMA
Δ 30
NADOR
Δ 115
S. KACEM Δ 102
Δ 107
KENITRA
Δ 110
○
RABAT
Δ 168
○ 122
CASABLANCA
FES
○ 74
Δ 102
Δ 93
Δ 88
OUJDA
Δ 146
MEKNES
Δ 120
Δ 99
○ 68
EL JADIDA
Δ 92
SETTAT
Δ 95
BENI MELLAL
Δ 102
SAFI
Δ 109
KSAR ES SOUK
Δ 87
MARRAKECH
Δ 157
○ 80
AGADIR
Δ 99

ÉCOLES RÉGIONALES 1963 – 64

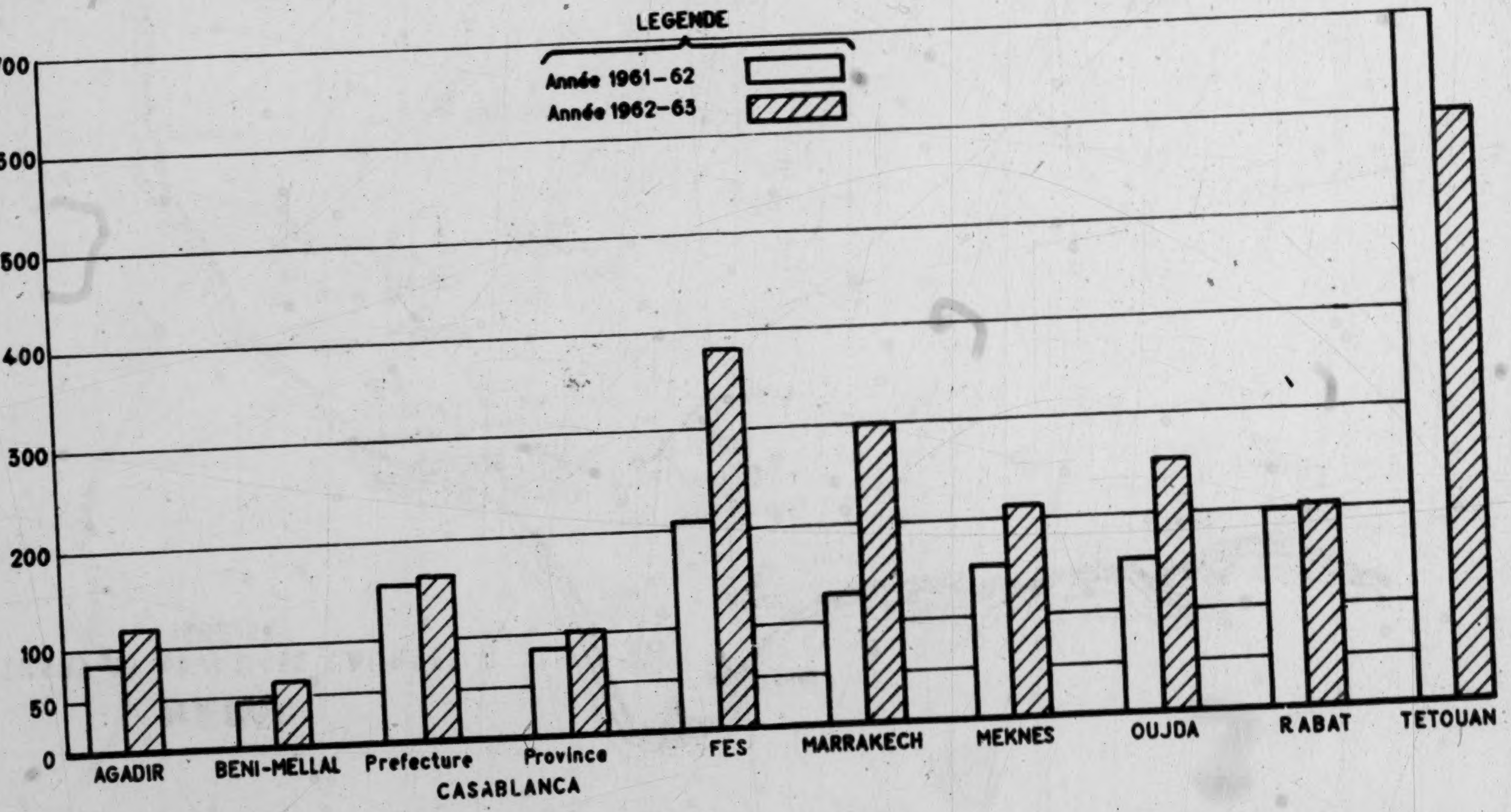
Ecoles Régionales d'instituteurs

INCREASE IN NUMBERS OF PUPIL TEACHERS

1956 - 1964

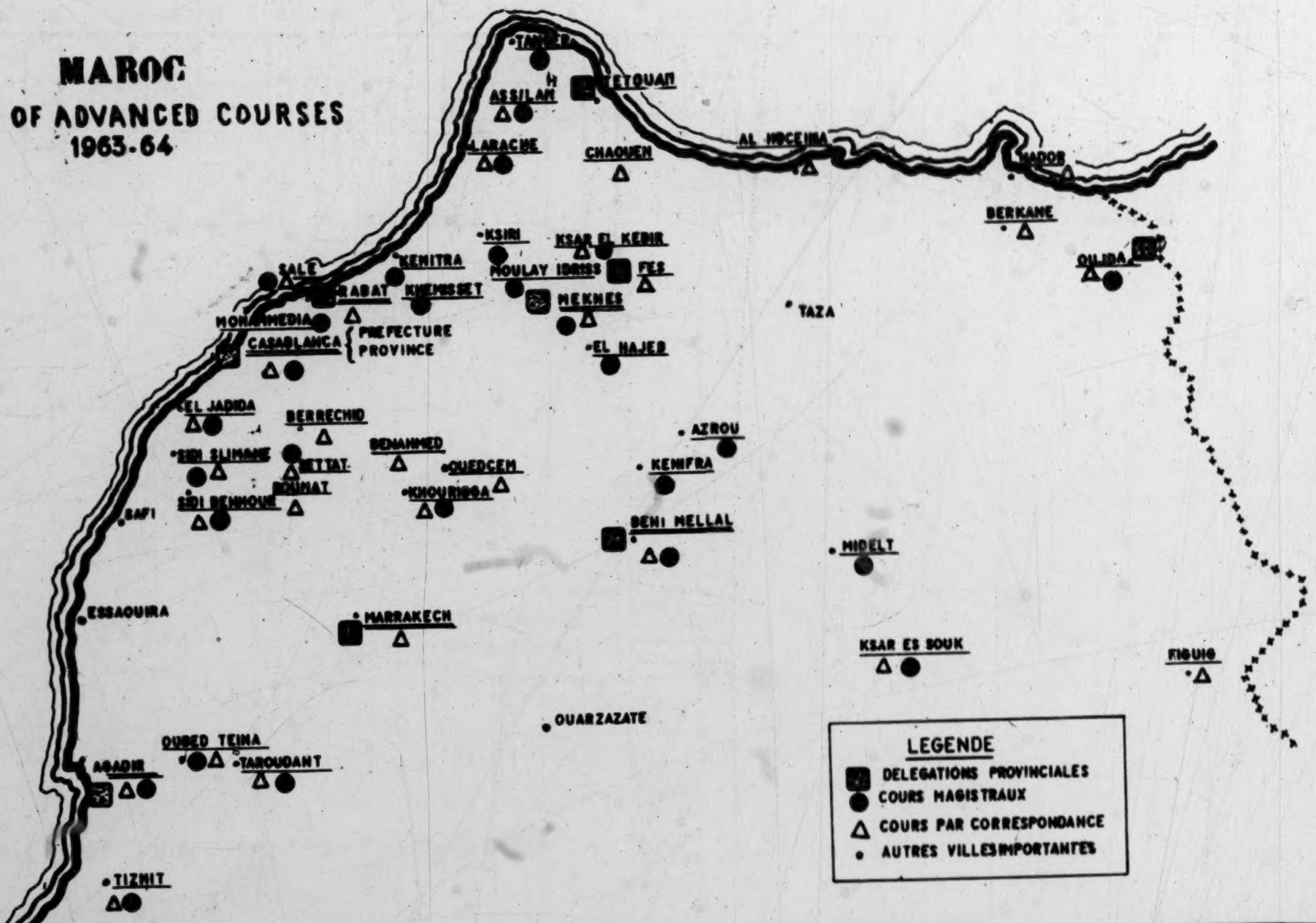


REGIONAL PRIMARY SCHOOL TEACHERS COLLEGE – PROVINCIAL ORIGIN OF PUPIL TEACHERS

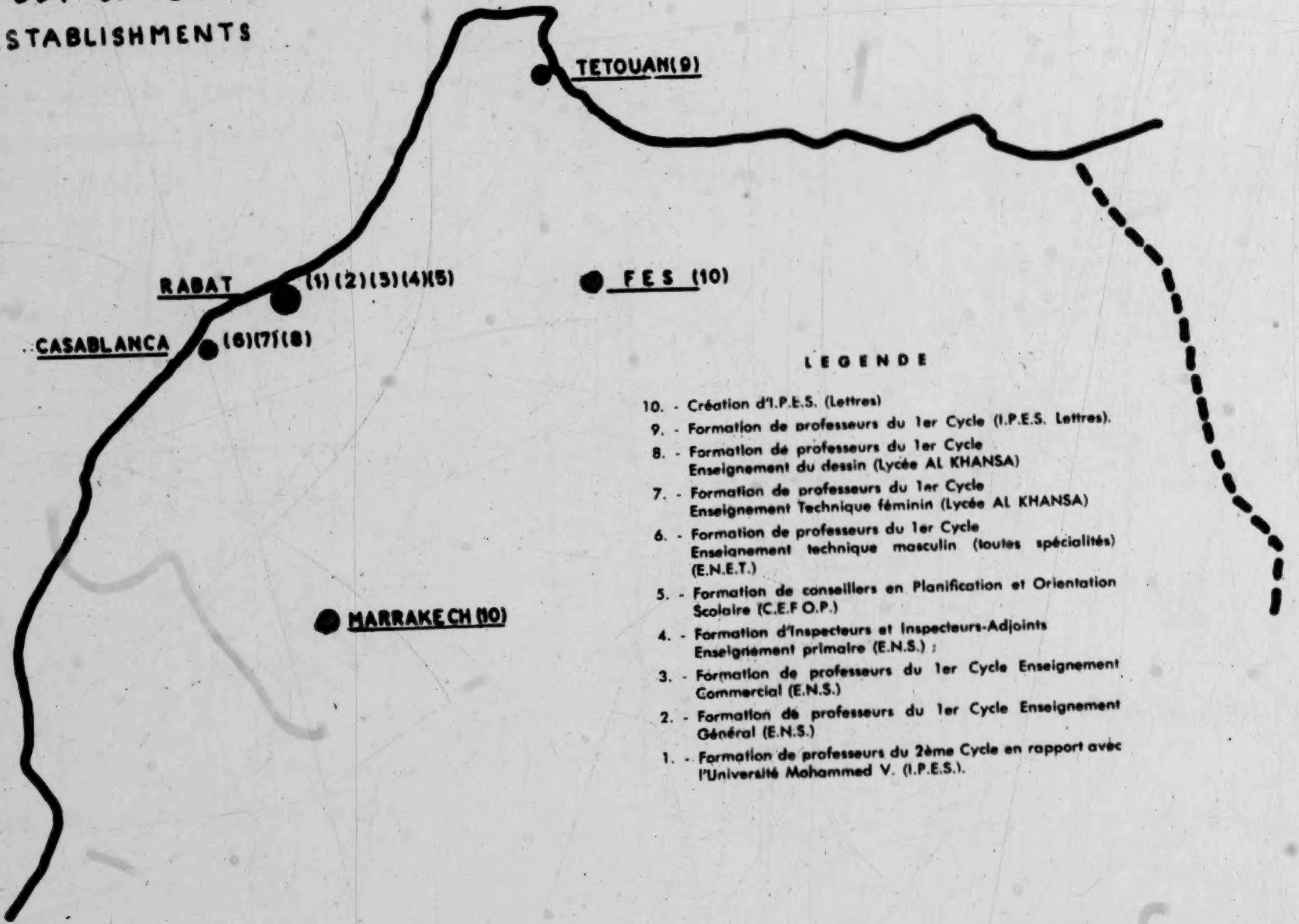


MAROC

CHART OF ADVANCED COURSES
1963-64


TANGER
TETOUAN
ASSILAH
LARACHE
CHAOUEN
AL HOCEIMA
NADOR
BERKANE
OUJDA
KSIRI
KSAR EL KEBIR
MOULAY IDRISS
FES
SALE
RABAT
KENITRA
KHEMISSET
MEKNES
TAZA
MOHAMMEDIA
CASABLANCA
PREFECTURE
PROVINCE
EL HAJEB
EL JADIDA
BERRECHID
BENAHMED
SIDI SLIMANE
SETTAT
OUEDZEM
BOUHAT
KHOURIBGA
SIDI BENNOUR
SAFI
AZROU
KENIFRA
BENI MELLAL
MIDELT
ESSAOUIRA
MARRAKECH
KSAR ES SOUK
FIGUIG
OUARZAZATE
OULED TEIMA
TAROUDANT
AGADIR
TIZNIT
LEGENDE
DELEGATIONS PROVINCIALES
COURS MAGISTRAUX
COURS PAR CORRESPONDANCE
AUTRES VILLES IMPORTANTES

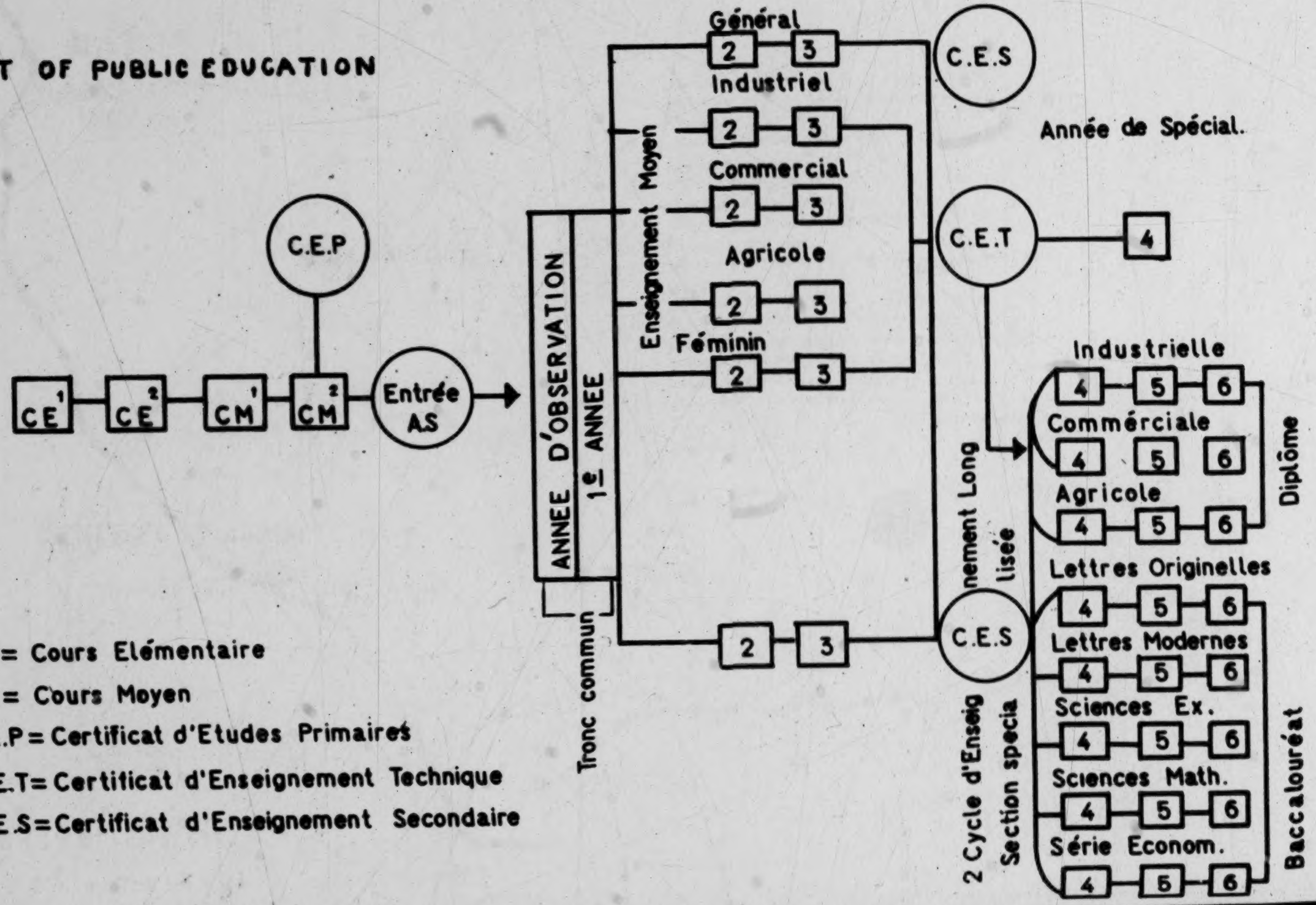
LAY-OUT OF TEACHER TRAINING ESTABLISHMENTS



LEGENDE

10. - Création d'I.P.E.S. (Lettres)
9. - Formation de professeurs du 1er Cycle (I.P.E.S. Lettres).
8. - Formation de professeurs du 1er Cycle Enseignement du dessin (Lycée AL KHANSA)
7. - Formation de professeurs du 1er Cycle Enseignement Technique féminin (Lycée AL KHANSA)
6. - Formation de professeurs du 1er Cycle Enseignement technique masculin (toutes spécialités) (E.N.E.T.)
5. - Formation de conseillers en Planification et Orientation Scolaire (C.E.F O.P.)
4. - Formation d'Inspecteurs et Inspecteurs-Adjoints Enseignement primaire (E.N.S.) ;
3. - Formation de professeurs du 1er Cycle Enseignement Commercial (E.N.S.)
2. - Formation de professeurs du 1er Cycle Enseignement Général (E.N.S.)
1. - Formation de professeurs du 2ème Cycle en rapport avec l'Université Mohammed V. (I.P.E.S.).

CHART OF PUBLIC EDUCATION


CE¹
CE²
CM¹
CM²
C.E.P
Entrée AS
ANNEE D'OBSERVATION
1e ANNEE
Tronc commun
Enseignement Moyen
Général
Industriel
Commercial
Agricole
Féminin
2
3
C.E.S
C.E.T
C.E.S
4
Année de Spécial.
2 Cycle d'Enseignement Long Section specialisée
Industrielle
Commérciale
Agricole
Diplôme
Lettres Originelles
Lettres Modernes
Sciences Ex.
Sciences Math.
Série Econom.
Baccalouréat
4
5
6

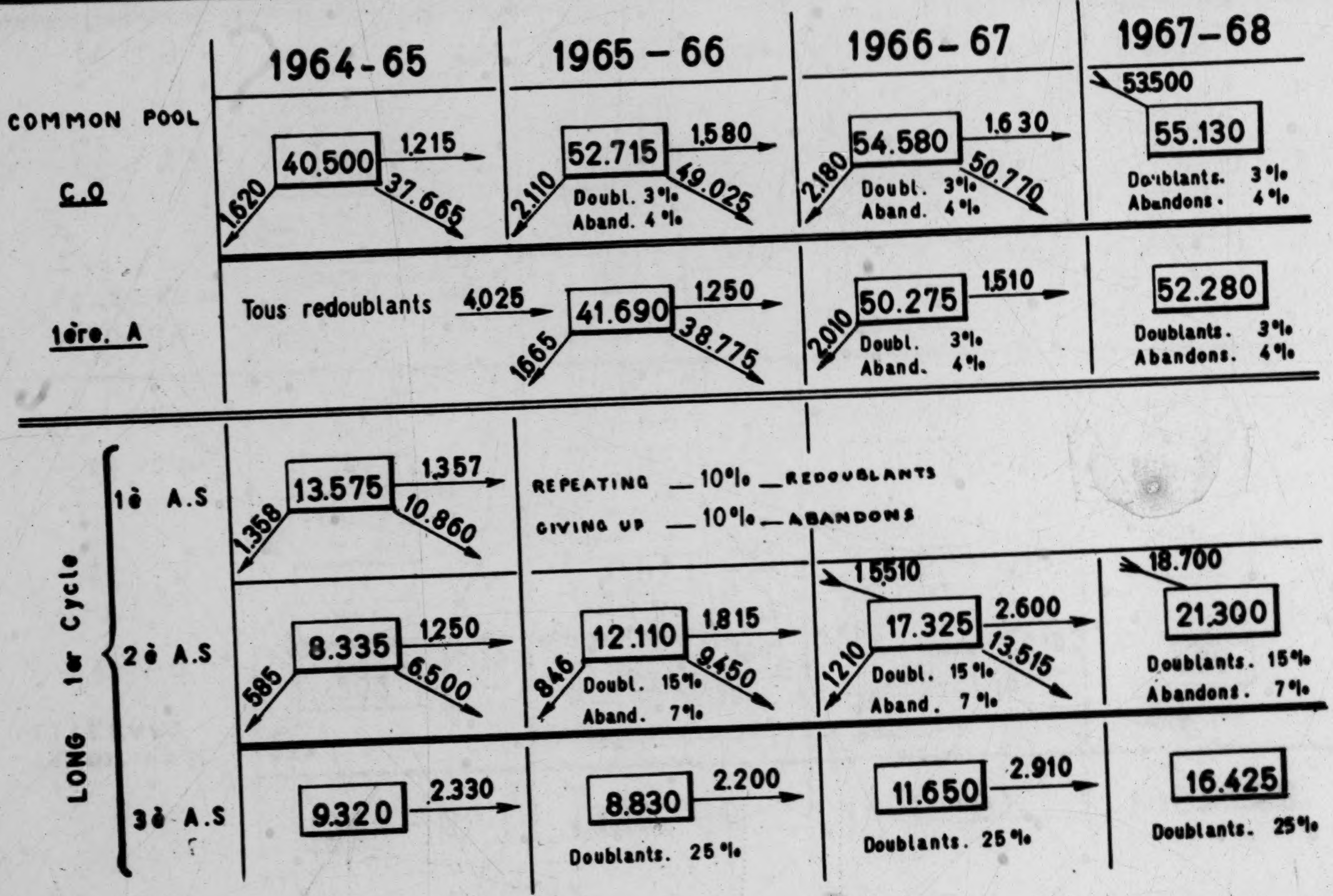
C.E = Cours Elémentaire

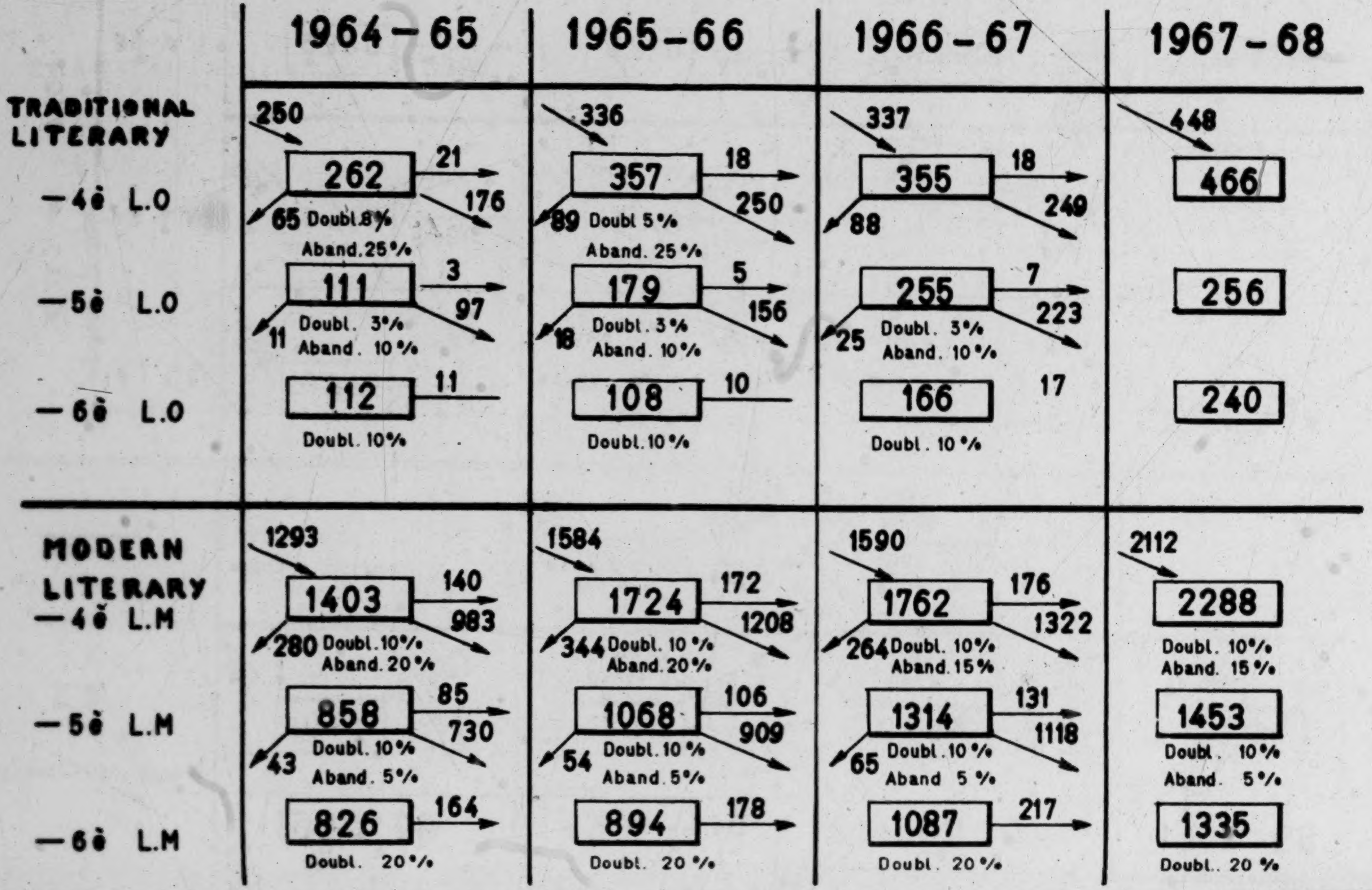
C.M = Cours Moyen

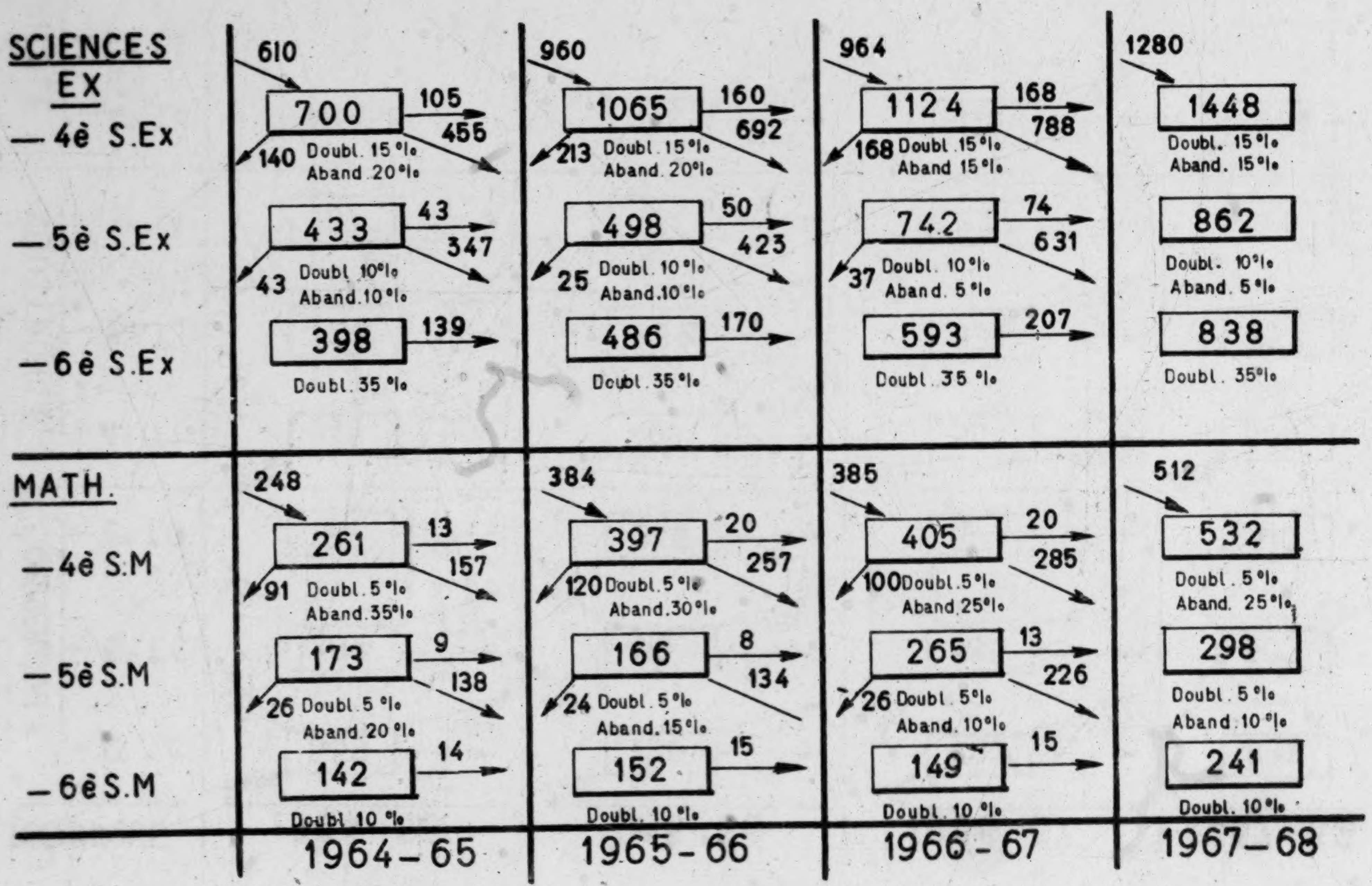
C.E.P = Certificat d'Etudes Primaires

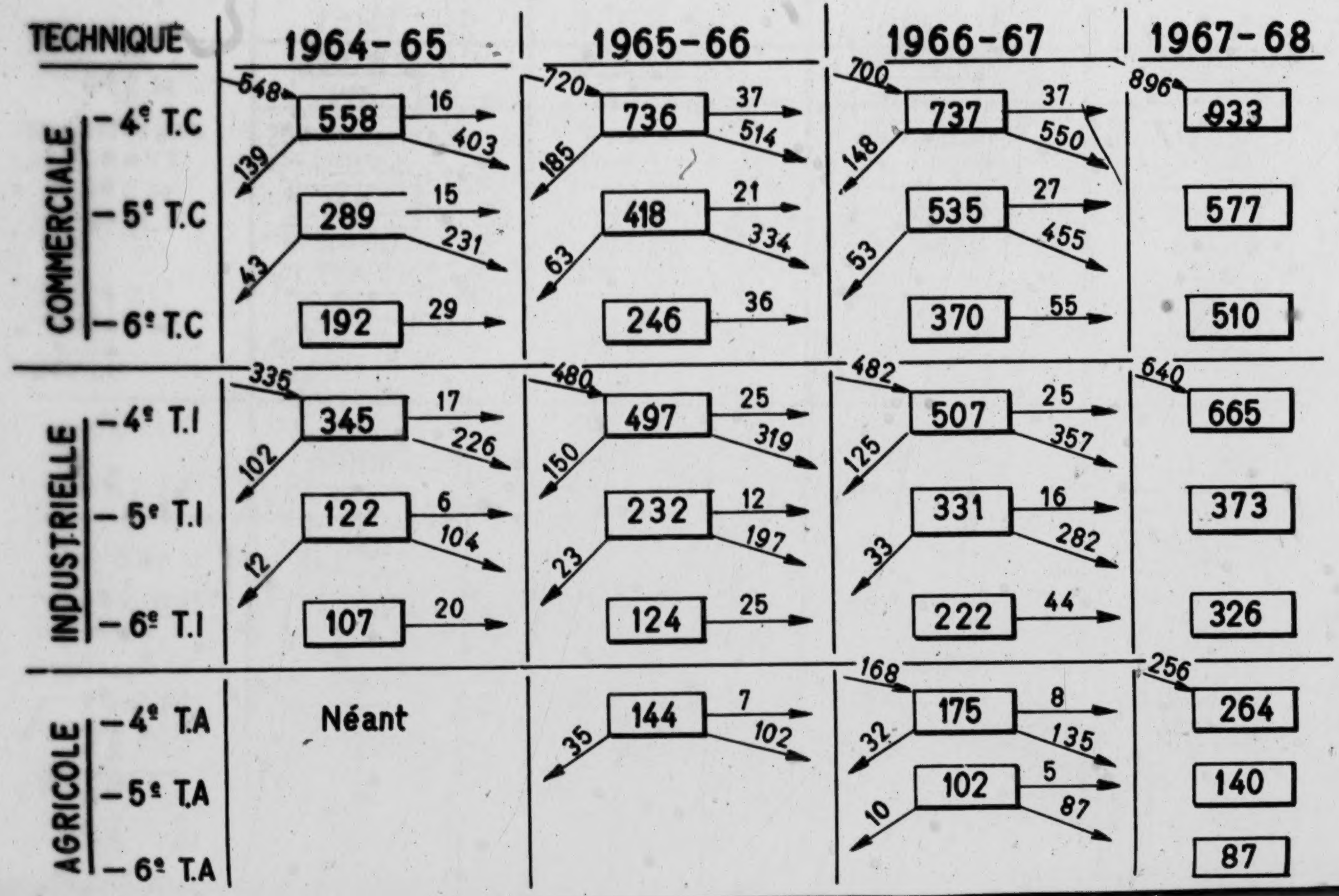
C.E.T = Certificat d'Enseignement Technique

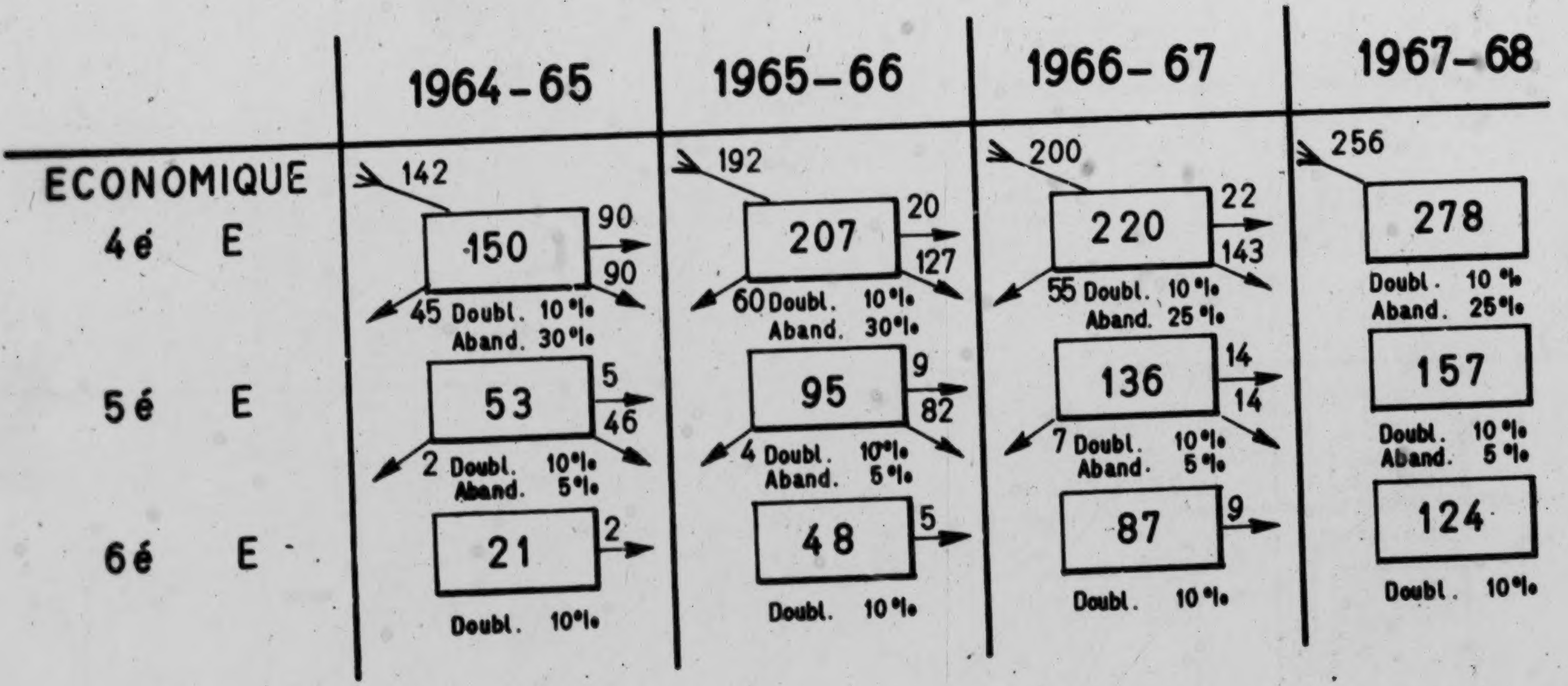
C.E.S = Certificat d'Enseignement Secondaire

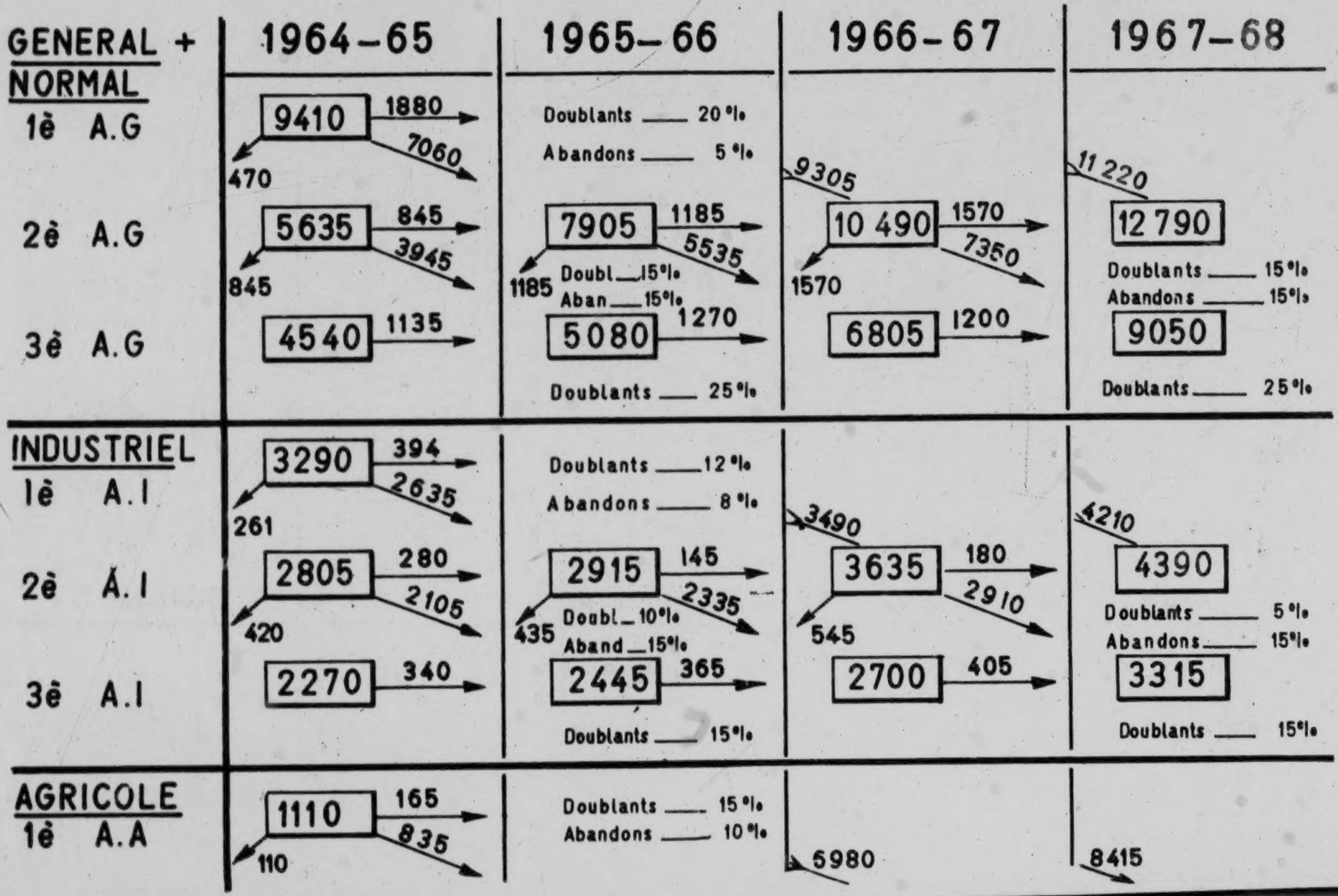

1964-65
1965 - 66
1966- 67
1967-68
COMMON POOL
C.O
40.500
1,215
1,620
37.665
52.715
1,580
2,110
49.025
Doubl. 3%
Aband. 4%
54.580
1,6 30
2,180
50.770
Doubl. 3%
Aband. 4%
53500
55.130
Doublants. 3%
Abandons. 4%
1ère. A
Tous redoublants
4,025
41.690
1,250
1665
38.775
50.275
1,510
2,010
Doubl. 3%
Aband. 4%
52.280
Doublants. 3%
Abandons. 4%
LONG 1er Cycle
1è A.S
13.575
1,357
1,358
10.860
REPEATING — 10% — REDOUBLANTS
GIVING UP — 10% — ABANDONS
2è A.S
8.335
1,250
585
6.500
12.110
1,815
846
9,450
Doubl. 15%
Aband. 7%
1 5,510
17.325
2.600
1210
13.515
Doubl. 15%
Aband. 7%
18.700
21,300
Doublants. 15%
Abandons. 7%
3è A.S
9.320
2.330
8.830
2.200
Doublants. 25%
11.650
2.910
Doublants. 25%
16.425
Doublants. 25%

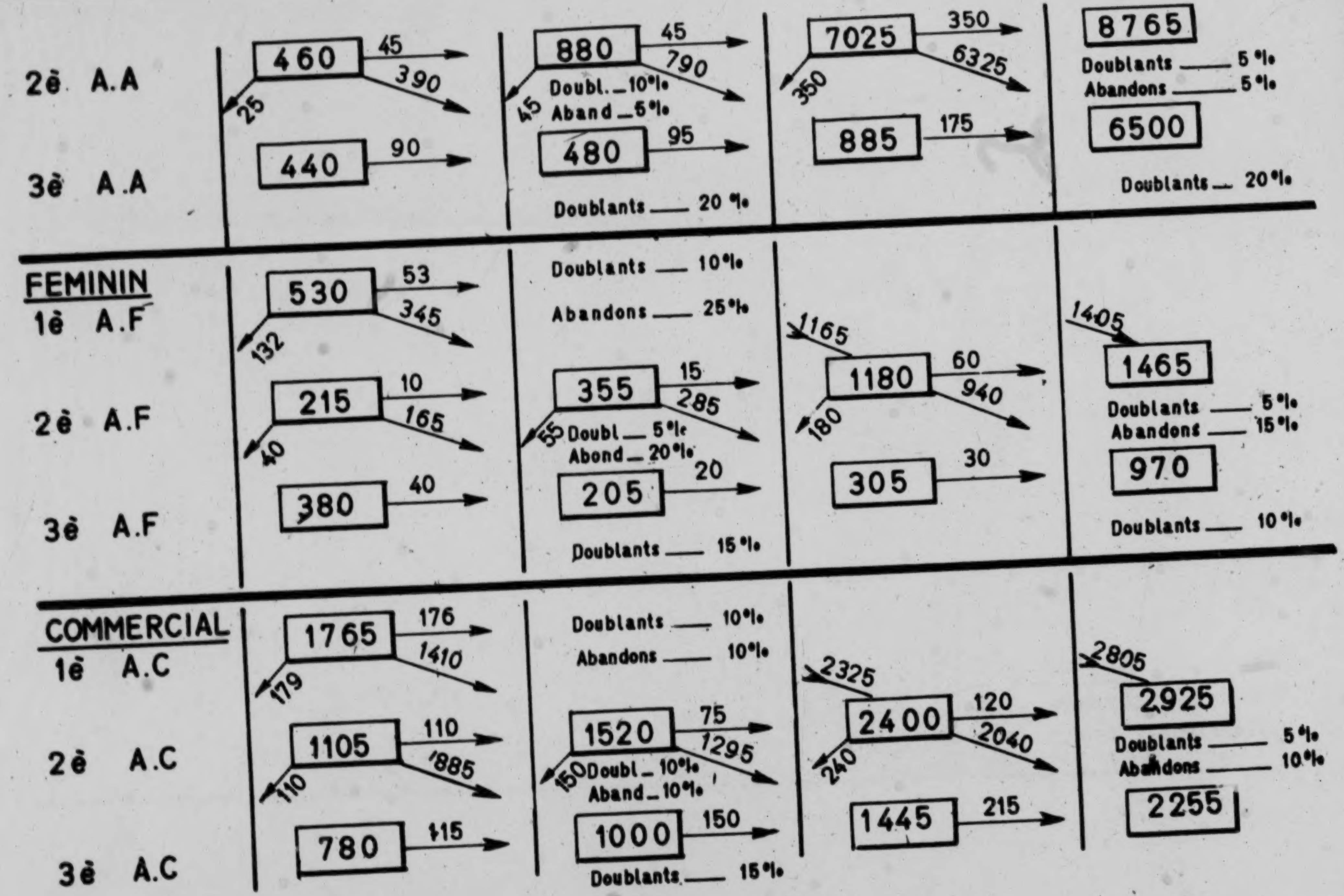

1964 – 65
1965–66
1966 – 67
1967 – 68
TRADITIONAL LITERARY
– 4è L.O
– 5è L.O
– 6è L.O
MODERN LITERARY
– 4è L.M
– 5è L.M
– 6è L.M
250
262
21
176
65 Doubl.8%
Aband.25%
111
3
97
11
Doubl. 3%
Aband. 10%
112
11
Doubl. 10%
336
357
18
250
89 Doubl 5%
Aband. 25%
179
5
156
18
Doubl. 3%
Aband. 10%
108
10
Doubl. 10%
337
355
18
249
88
255
7
223
25
Doubl. 3%
Aband. 10%
166
17
Doubl. 10%
448
466
256
240
1293
1403
140
983
280 Doubl. 10%
Aband. 20%
858
85
730
43
Doubl. 10%
Aband. 5%
826
164
Doubl. 20%
1584
1724
172
1208
344 Doubl. 10%
Aband. 20%
1068
106
909
54
Doubl. 10%
Aband. 5%
894
178
Doubl. 20%
1590
1762
176
1322
264 Doubl. 10%
Aband. 15%
1314
131
1118
65
Doubl. 10%
Aband 5%
1087
217
Doubl. 20%
2112
2288
Doubl. 10%
Aband. 15%
1453
Doubl. 10%
Aband. 5%
1335
Doubl. 20%

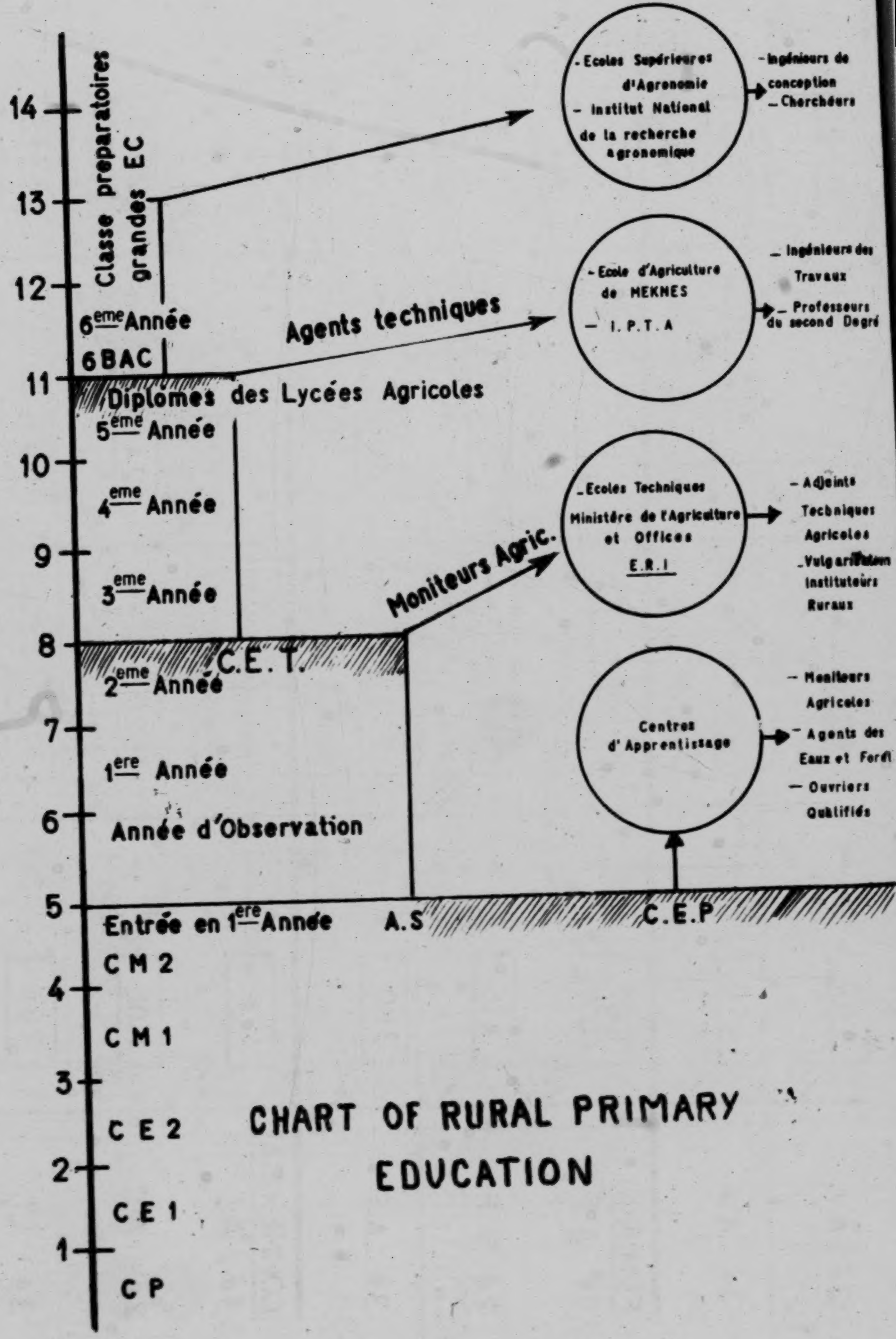

SCIENCES EX
— 4è S.Ex
— 5è S.Ex
— 6è S.Ex
MATH.
— 4è S.M
— 5è S.M
— 6è S.M
610
700
105
455
140
Doubl. 15 %
Aband. 20 %
433
43
347
43
Doubl 10%
Aband. 10 %
398
139
Doubl. 35 %
960
1065
160
692
213
Doubl. 15 %
Aband. 20%
498
50
423
25
Doubl. 10 %
Aband. 10 %
486
170
Doubl. 35 %
964
1124
168
788
168
Doubl. 15 %
Aband 15 %
742
74
631
37
Doubl. 10 %
Aband. 5 %
593
207
Doubl. 35 %
1280
1448
Doubl. 15 %
Aband. 15 %
862
Doubl. 10%
Aband. 5 %
838
Doubl. 35%
248
261
13
157
91
Doubl. 5 %
Aband. 35%
173
9
138
26
Doubl. 5 %
Aband. 20 %
142
14
Doubl 10 %
384
397
20
257
120
Doubl. 5 %
Aband. 30 %
166
8
134
24
Doubl. 5 %
Aband. 15 %
152
15
Doubl. 10 %
385
405
20
285
100
Doubl. 5 %
Aband. 25 %
265
13
226
26
Doubl. 5%
Aband. 10 %
149
15
Doubl. 10 %
512
532
Doubl. 5 %
Aband. 25 %
298
Doubl. 5 %
Aband. 10 %
241
Doubl. 10 %
1964–65
1965–66
1966–67
1967–68


TECHNIQUE
1964-65
1965-66
1966-67
1967-68
COMMERCIALE
-4e T.C
-5e T.C
-6e T.C
INDUSTRIELLE
-4e T.I
-5e T.I
-6e T.I
AGRICOLE
-4e T.A
-5e T.A
-6e T.A
Néant


1964-65
1965-66
1966-67
1967-68
ECONOMIQUE
4é E
5é E
6é E
142
150
90
90
45 Doubl. 10 %
Aband. 30 %
53
5
46
2 Doubl. 10 %
Aband. 5 %
21
2
Doubl. 10 %
192
207
20
127
60 Doubl. 10 %
Aband. 30 %
95
9
82
4 Doubl. 10 %
Aband. 5 %
48
5
Doubl. 10 %
200
220
22
143
55 Doubl. 10 %
Aband. 25 %
136
14
14
7 Doubl. 10 %
Aband. 5 %
87
9
Doubl. 10 %
256
278
Doubl. 10 %
Aband. 25 %
157
Doubl. 10 %
Aband. 5 %
124
Doubl. 10 %

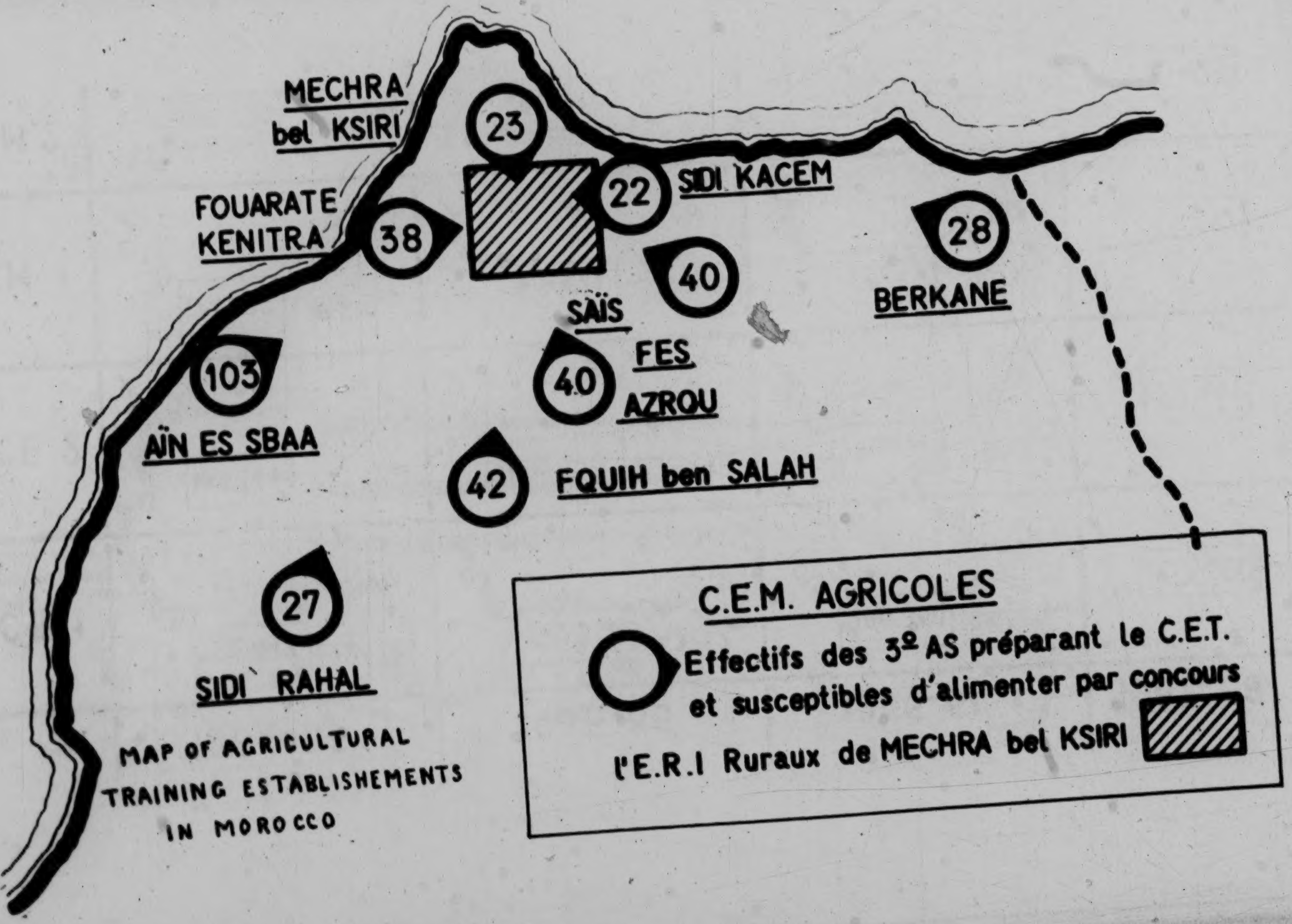

GENERAL + NORMAL
1è A.G
2è A.G
3è A.G
INDUSTRIEL
1è A.I
2è A.I
3è A.I
AGRICOLE
1è A.A
1964-65
1965-66
1966-67
1967-68
9410
1880
7060
470
5635
845
3945
845
4540
1135
Doublants ____ 20 %
Abandons ____ 5 %
7905
1185
5535
1185
Doubl ___ 15 %
Aban ___ 15 %
5080
1270
Doublants ____ 25 %
9305
10 490
1570
7350
1570
6805
1200
11 220
12 790
Doublants ____ 15 %
Abandons ____ 15 %
9050
Doublants ____ 25 %
3290
394
2635
261
2805
280
2105
420
2270
340
Doublants ____ 12 %
Abandons ____ 8 %
2915
145
2335
435
Doubl ___ 10 %
Aband ___ 15 %
2445
365
Doublants ____ 15 %
3490
3635
180
2910
545
2700
405
4210
4390
Doublants ____ 5 %
Abandons ____ 15 %
3315
Doublants ____ 15 %
1110
165
835
110
Doublants ____ 15 %
Abandons ____ 10 %
5980
8415


2è A.A
3è A.A
Doubl. _ 10 %
Aband _ 5 %
Doublants ___ 20 %
Doublants ___ 5 %
Abandons ___ 5 %
Doublants ___ 20 %
FEMININ
1è A.F
2è A.F
3è A.F
Doublants ___ 10 %
Abandons ___ 25 %
Doubl ___ 5 %
Abond ___ 20 %
Doublants ___ 15 %
Doublants ___ 5 %
Abandons ___ 15 %
Doublants ___ 10 %
COMMERCIAL
1è A.C
2è A.C
3è A.C
1765
1885
Doublants ___ 10 %
Abandons ___ 10 %
1520
Doubl _ 10 %
Aband _ 10 %
Doublants ___ 15 %
2040
Doublants ___ 5 %
Abandons ___ 10 %

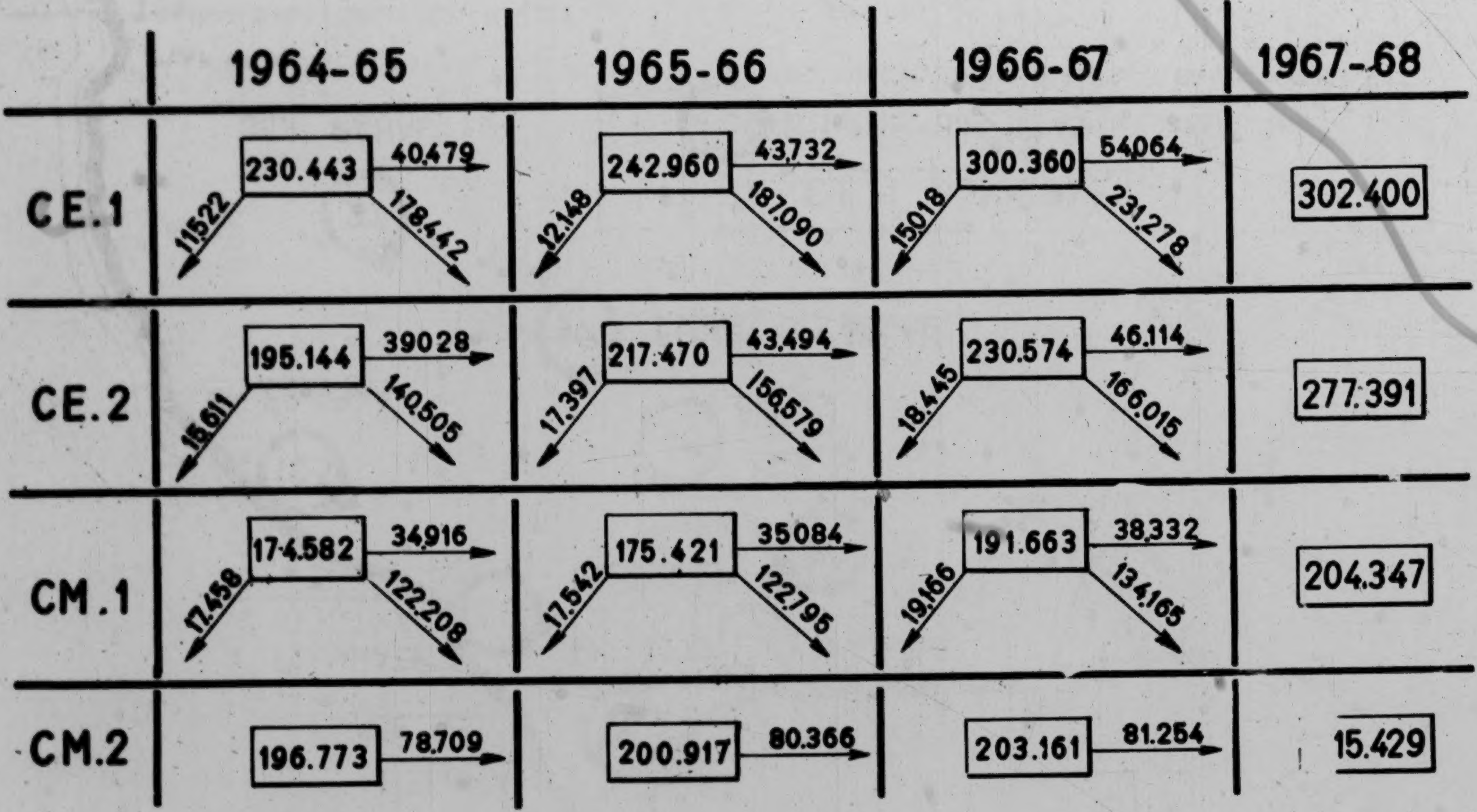


14
13
12
11
10
9
8
7
6
5
4
3
2
1
Classe preparatoires grandes EC
6eme Année
6 BAC
Agents techniques
- Ecoles Supérieures d'Agronomie
- Institut National de la recherche agronomique
- Ingénieurs de conception
- Chercheurs
- Ecole d'Agriculture de MEKNES
- I.P.T.A
- Ingénieurs des Travaux
- Professeurs du second Degré
Diplomes des Lycées Agricoles
5eme Année
4eme Année
3eme Année
Moniteurs Agric.
- Ecoles Techniques Ministère de l'Agriculture et Offices
E.R.I
- Adjoints Techniques Agricoles
- Vulgarisation Instituteurs Ruraux
C.E.T.
2eme Année
1ere Année
Année d'Observation
Centres d'Apprentissage
- Moniteurs Agricoles
- Agents des Eaux et Forêt
- Ouvriers Qualifiés
Entrée en 1ere Année
A.S
C.E.P
CM 2
CM 1
CE 2
CE 1
CP

CHART OF RURAL PRIMARY EDUCATION


MECHRA bel KSIRI
23
FOUARATE KENITRA
38
22
SIDI KACEM
28
40
BERKANE
SAÏS
FES
40
AZROU
103
AÏN ES SBAA
42
FQUIH ben SALAH
27
SIDI RAHAL
C.E.M. AGRICOLES
Effectifs des 3^e AS préparant le C.E.T. et susceptibles d'alimenter par concours l'E.R.I Ruraux de MECHRA bel KSIRI

MAP OF AGRICULTURAL TRAINING ESTABLISHEMENTS IN MOROCCO


1964-65
1965-66
1966-67
1967-68
CE.1
230.443
40.479
11.522
178.442
242.960
43.732
12.148
187.090
300.360
54064
15018
231.278
302.400
CE.2
195.144
39028
15.611
140.505
217.470
43.494
17.397
156.579
230.574
46.114
18.445
166.015
277.391
CM.1
174.582
34.916
17.458
122.208
175.421
35084
17.542
122.795
191.663
38.332
19.166
134.165
204.347
CM.2
196.773
78.709
200.917
80.366
203.161
81.254
15.429

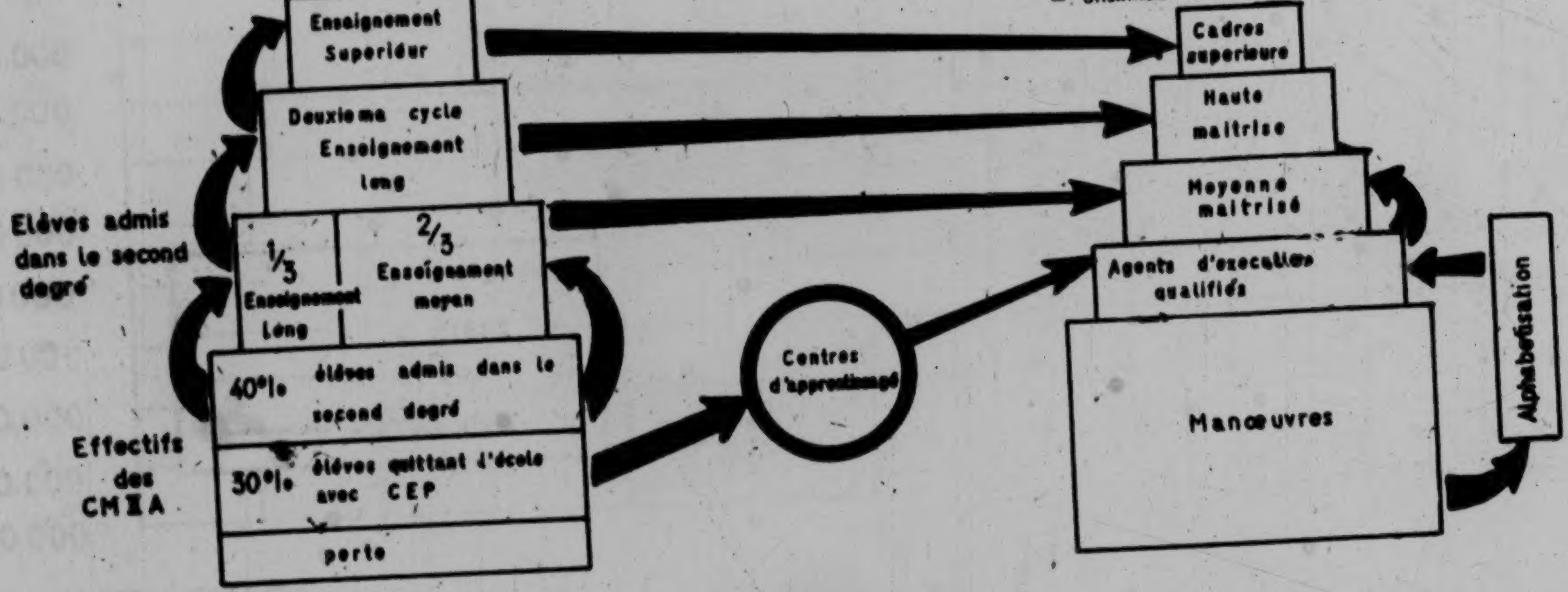
ETUDE COMPARATIVE ENTRE LA PYRAMIDE SCOLAIRE ET LA PYRAMIDE DES DIFFERENTS PALIERS DE LENTREPRISE

GLOSSARY

(Comparative study between the school pyramid and the different levels in firms)

The pyramid on the left shows all levels of education from « Enseignement supérieur » - higher education - down to « perte » = pupils lost to the system.

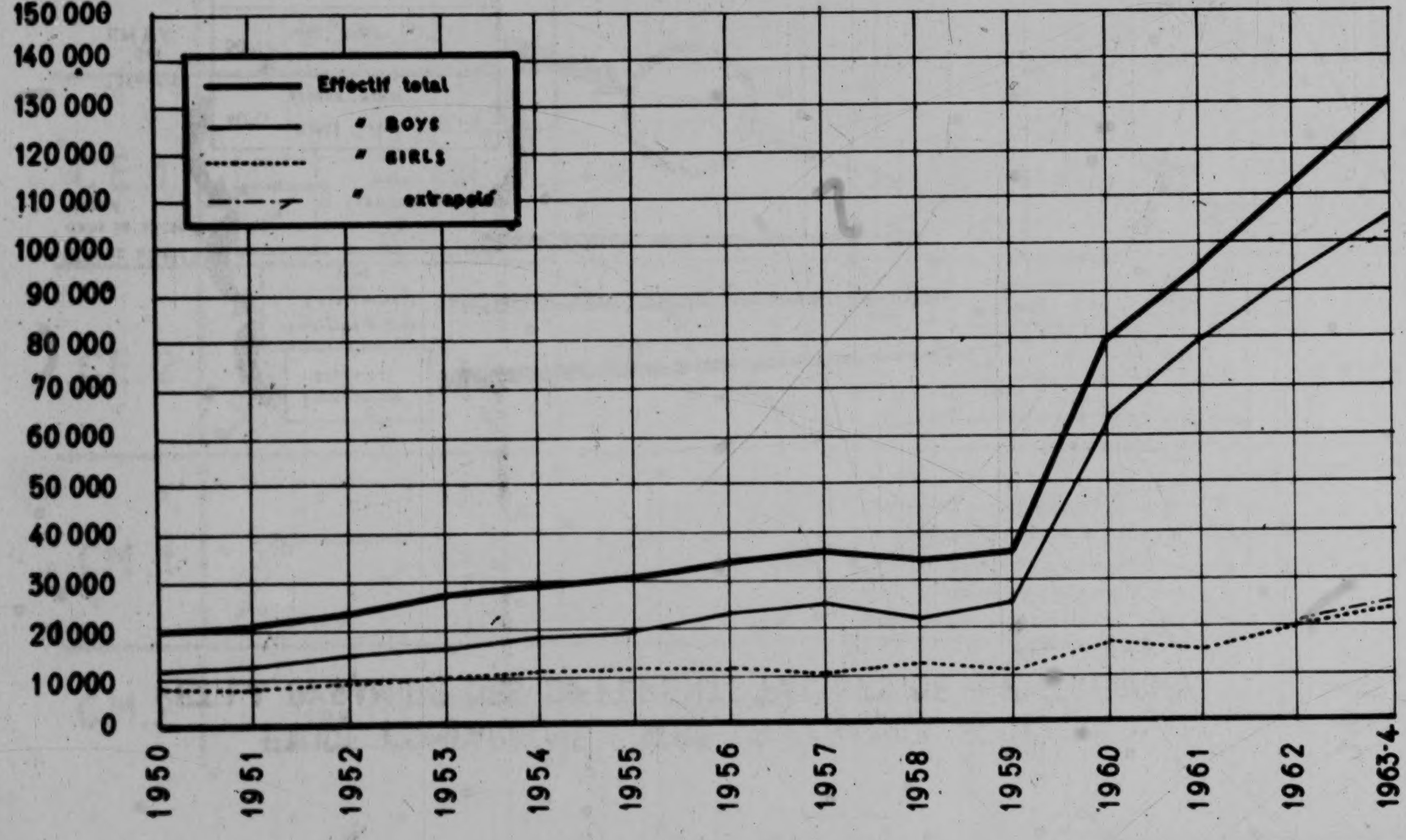
The pyramid on the right gives the usual levels of skill in industry ending with « Manœuvres » = unskilled workmen.


Enseignement Superiéur
Deuxieme cycle Enseignement long
Elèves admis dans le second degré
1/3 Enseignement Long
2/3 Enseignement moyen
40% élèves admis dans le second degré
Effectifs des CM II A
30% élèves quittant l'école avec CEP
perte
Centres d'apprentissage
Cadres superieurs
Haute maitrise
Moyenne maitrisé
Agents d'execution qualifiés
Manœuvres
Alphabetisation

M.E.N

Bureau des Statistiques

NUMBERS TAKING SECONDARY EDUCATION



CHAPTER IV

SUBSTRUCTURE

I. - General presentation
II. - Roads
III. - Specific projects
IV. - Railways
V. - Harbours
VI. - Civil aviation
VII. - Telecommunications
VIII. - Radio/T.V.

1. - General presentation

The 1965-67 public equipment programme is as follows·

	1965	1966	1967
		Thousands of DH	
A. - Roads and third-class roads	43,510,000	40,110,000	38,380,000
B. - Infrastructure tied to specific projects	20,210,000	27,000.000	11,000,000
C. - Railways	19,689,000	19,263,000	16,048,000
D. - Harbours	24,295,000	17,965,000	5.940,000
E. - Aeronautic substructure	14,035,000	10,405,000	6,560,000
F. - Telecommunications	22,040,000	23,282,000	11,075,000
G. - Radio/TV	6,700,000	5,000,000	4,896,000
Total	150,479,000	143,025,000	95,799,000

Let us recall allocations for the same type of operation during the last three financial years:

Expenditure on substructure in	1962	123,292 thousands of dirhams
	1963	199,502
	1964	170,829

We see therefore that after reaching a peak in 1965 expenses on this item will be considerably reduced.

This development is due to the fact that severe financial restrictions are imposed on this sector which **does not have priority in the general Plan policy.** Only those operations which are linked with the big priority sectors, especially Agriculture and Tourism, have been maintained without difficulty. All other sectors have been subjected to rigorous scrutiny.

Obviously we have had to preserve operations already undertaken, which explains why the reduction in investment has only been gradual, the share of these operations being very large in 1965 and relatively so in 1966. Consideration has also been given to operations which are essential for the satisfaction of priority needs and operations with a very high profitability.

On the other hand all non-essential operations have been eliminated even when their profitability seems to be high and especially operations intended to improve the quality of services and the satisfaction of users.

The application of these principles has raised some awkward problems and some decisions already approved in principle have had to be questioned.

— As regards roads we have had to reduce the construction of new roads in favour of roads of tourist interest and third-class roads.

— As for the railways we have had to set aside operations which are interesting and likely to improve service, such as the electrification of the Benguerir-Safi line and a fast side-line between Casablanca and Marrakesh.

— As regards harbours, we have had to set aside all development projects apart from Tangier, Casablanca and Safi.

— The equipment of civil aviation has been reduced from the technical point of view, which means we have had to abandon all improvements to air terminals. Moreover a scheme for agricultural meteorological stations has been postponed.

— In the field of telecommunications, the slowing-down of the equipment rate may entail considerable delay in the connection of non-priority subscribers. As for postal services the construction of new post-offices in isolated areas has been slowed down.

— As regards Radio/TV restrictions mainly affect television. The extension of the network to Agadir will be postponed and the aquipment of TV studios will be carried out only to a limited extent

⁂

II. - Roads

Orientation of the programme

Morocco has an excellent network of roads, well maintained and well adapted to traffic. Of course it is not equally satisfactory in all areas as a result of circumstances prevailing before independence. We might say that it is not developing in step with the demand or that it is not sufficiently dense. But considering national production and the average income it appears very satisfactory.

Nevertheless, despite this situation, a large road programme is included in the 1965-67 plan.

This is justified:

— in the first place by general priorities accorded to tourism and agriculture which have a certain effect on road planning.

— Secondly by a certain number of **inevitable** needs, such as repairs to flood damage, need for traffic on the most heavily loaded sectors, the need to fill a gap created by historical events, e.g the "Unity Road".

The whole road programme will therefore amount to 90 million DH distributed more or less as follows:

Main and secondary roads

Tourist routes (T)	14,650	million
Repairs to flooded areas (c)	21,880	»
Extension and reinforcement (miscellaneous)	14,470	» »
	51,000	»

Third-class roads

Tourist routes	4780	million DH
Other third-class roads	34,220	»
	39,000	»

Content of the programme

1. - Tourist routes

The main operations concern tourism and have been defined under the overall tourist development scheme. We should therefore consult the chapter entitled "Tourism" to find a justification. The following are the principal operations:

Tangier-Fnideq	1.750 million
Tangier-Bou Hamed	1.200 »
Aït Kamara-Beni Bufrah	0.180 »
Completion Al Hoceima-Fez	1.700 »
Continuation Ksar-es-Souk - Ouarzazate	4.700 »
Continuation Agdz-Zagora	1.680 »
Improvement Tinerhir-Boulmane	1.500 »

2. Repairs to flooded areas etc.

Flood damage in recent years has been such that complete repairs have proved impossible. Thus, merely to return to the previous position a great deal of money must be spent, about 21.880 million DH coming under the 1965-67 plan.

Operations can be listed under the following traditional headings:

A. — **North-South traffic** (with the Riff)

It is mainly a question of completing the Unity Road between Taounate and Ketama and works north of Taza and Guercif: 3.500 million DH.

B. — **Arterial roads**

N° 1 : Casablanca-Oujda

Some improvements are being made. Nothing however is being done to the Rabat-Casablanca road which has the heaviest traffic in Morocco. This will be a specific project.

N° 2 : Tangier-Tantan

The bridge over the Loukkos at Larache and the extension of the road in the direction of Tantan are the main operations.

N° 4 : Tangier-Oujda

Improvement of the road between Tangier and Al Hoceima.

Nº 6 : Agadir-Figuig

Continued construction of the RP 32 between Kelaa Mgouna and Ksar-es-Souk and Ksar-es-Souk and Boudenib, also construction of RP 19 between Bouarfa and Figuig.

Nº 8 : Fez-Agadir

Improvement of Tizi n'Test route.

C. — **Secondary routes**

1) Rabat: Road from Moulay Bousselham-Larache and important repairs to flooded areas in the Rharb.

2) Meknes: Moulay Idriss and Volubilis

3) Fez: Continuation of construction Guercif-Midelt and flood repair north of Fez and Taza.

4) Oujda: Reconstruction of the 604 bridge over the Nekkor.

5) Tetuan: Continuation reconstruction: Ksar-el-Kebir - Dardaïa - Tangier - Fnideq.

Targuist-Tabarant

Tetuan-Bou Hamed and flood repairs on 601, 602, 603, 606, 611, 612.

Other work will be undertaken in accordance with local conditions, whereas a great effort will be made to build tourist roads, including the road Meknes-Oulmes-Khenifra and tourist roads 1901 and 6902.

Recapitulation

North-South	3.500	million DH
Arterial roads	26,430	»
Secondary routes	21,070	»
Third-class roads	39,000	»
	90,000	»

The distribution of expenses over the three years is more or less as follows:

1965	33.510 million DH
1966	29.110
1967	27.380

D. — "Promotion Nationale"

Technical services using the PM can carry out on their own all work permitting the opening of work-sites and employment of a considerable labour force.

There will an additional programme costing 14 million working days. Without taking into account payment in kind, operations can be set out as follows: (in thousands of DH)

	1965		1966		1967		TOTAL	
	Days	Expense	Days	Expense	Days	Expense	Days	Expense
Roads etc.	3.000	10.000	3.500	11.000	3 500	11.000	10 000	32.000

E. — **Recapitulation — Investment on roads** (in thousands of DH)

	1965	1966	1967	TOTAL
1° Main and secondary	11.350	12.000	13.000	36.350
2° Third-class	13.220	10.000	11.000	34.220
3° Mining tracks..	P.M.	P.M.	P.M.	P.M.
4° Equipement and surveys	P.M.	P.M.	P.M.	P.M.
5° Tourist routes..	8.940	7.110	3.380	19.430
6° P.M.	10.000	11.000	11.000	32.000
Total	43.510	40.110	38.380	122.000

⁂

III. - Substructure linked to specific projects

I. — Safi Chemical Complex

Substructure work has been started to a great extent and expenses can be determined from the latest estimates, deducting everything to be completed at the end of 1964.

Th principal work still to be completed is as follows:

— The greater part of extension work, Safi harbour etc.

— Improvement of road N° 99 between the Kettara mines and El Aria station and a new road 7.5 km. long between the complex and the port.

— Purchase of hopper-waggons

— Completion of water supply

— Construction of 218 dwellings for workmen and personnel

— Improvements at Kettara mine: water supply and housing.

The constructions of the 60 km. Tensift-Kettara line comes under the O.N.E equipment programme.

The latest estimates for the cost of the work, taking into account various modifications, are as follows:

a) General surveys	1,000,000 DH
b) Port service	37,000,000
c) Road service	6,350,000
e) Railway service	14,600,000
e) Water supply	17,000,000
f) Power	330,000
g) Town planning and housing	3,400,000
h) Improvements and water supply at Kettara mine.	3,100.000
	82,780,000 DH.

The completion of this work would therefore need the following credits previously opened (55,570,000)

1965	12,210,000
1966	15,000,000

This programme will be thoroughly examined with a view to achieve economy in investment without compromising the whole of the project.

II. — Substructure linked with the sugar-beet areas in the Rharb

A network of third-class roads is essential for rapid harvesting of beet during the sugar season. Total amount: 14,900 000 DH. This operation has obtained special financing from the IBRD under the scheme for development of the Sidi Slimane area for national sugar production.

III. — Industrial zone in Tangier

This scheme is being studied at the moment. A provisional allocation of 17 million DH will be provided for in order to buy land etc.

IV. — Recapitulation

The whole of these operations will need the following expenditure:

1965	20,210,000 DH
1966	27,000,000
1967	11,900,000.

⁂

IV. - Railways

Railways are the best method of massive and rapid transport. It is especially economic in these conditions but not in the case of transporting a few passengers with their luggage. In short the railways are a wholesale concern leaving the roads to the retail trade.

As far as this country is concerned it is clear that our railways are best adapted to the following traffic:

1/ Mining products, especially phosphates

2/ Main lines handling huge quantities of agricultural and industrial goods as well as passengers.

Thus, apart from the mineral deposits and their harbours, railway connections are only justified between large centres.

Morocco has a very nearly adequate railway system, although it is old-fashioned and somewhat worn. The Three Year Plan does not provide for any extension, apart from completion of the extension Khouribga-Beni Idir, needed for the phosphate industry Moreover, in view of the lack of capital, investment will be restricted to a bare minimum of renovation and essential improvement to meet extra traffic, especially for phosphates. Thus the electrification of the Benguerir-Safi line, which would appear profitable from the point of view of a private firm, has no part in the Plan. Replacement of passenger coaches about forty years old and mainly amortized are also left out. As for the track we must be content to maintain it in its present state without consideration for speed or comfort.

Under these conditions the programme agreed upon comprises essentially operations provided for in the Five Year Plan or in previous plans. We must add certain expenditure for traffic development. All in all these diverse operations can be grouped as follows:

1/ Work on stations	2,396,670 DH

This is mainly a matter of renewing points, telephones and signals.

2/ Track	15,495,527 DH

Really worn-out track must be replaced and the rail bed must be reinforced (with special reference to flood damage), mainly on the Sidi-Kacem - Tangier line. The doubling of the stretch Moaline-El Oued-Khouribga will be continued and finished.

3/ Service equipment and traction.

This work has become necessary by increased exploitation and mainly concerns the Casablanca depot: 5,166,915 DH.

4/ Purchase of goods-waggons and locomotives: 27,105,010 DH.

5/ Housing and buildings: 550,000 DH

6/ Miscellaneous: 4,285,878 DH

7/ Hotels: 5,800,000 DH as an indication. Investments are accounted for under the chapter "Tourism".

Mainly concerned are the hotels at Fez (Palais Jamaï) and Meknes which belonged to the former concessionary company and which are being extended and modernised. Thes operations are moreover covered by the chapter "Tourism". Other hotels are also to be modernised.

RECAPITULATION

Main programme

I. — Expenditure for 1965-67

Stations	1,396,670
Track	15,495,527
Service equipment and traction	5,166,915
Purchase of waggons and locomotives	27,105,010
Housing	550,000
Miscellaneous	4,285,878
Hotels	indication
Total	55,000,000 DH.

II. — **Later expenses**

Supplementary programme (if phosphate forecast is confirmed)
5,500,000 DH.

The annual distribution of this expenditure over three years would be as follows:

1965	19,689,113 DH
1966	19,263,094
1967	16,047,793
	55,000,000 DH.

V. - Harbours

Orientation of programme

First of all we must say that harbour installations contribute to economic development by facilitating foreign trade, acquisition of foreign currency and encouraging fisheries.

Existing facilities must be modernised according to the expansion of traffic and fisheries.

Apart from this classic function we must consider the part that our harbours have to play in **industrialisation.** In fact many industrial sectors could not develop at all if they were limited to the home market. In some cases the size of profitable plants is always increasing and a considerable portion of production must be exported. Moreover, most plants import raw materials and equipment.

To reduce supply costs as well as shipping costs, industrialists naturally look for port facilities. This tendency, noticeable in all industrialised countries, is also present in Morocco.

Moreover modern industrialisation tends more and more to gather round powerful centres of development where the concentration of labour and general activity assists dynamic productivity.

For this reason only three major ports have been selected to receive the new industries, which are grouped in three powerful industrial complexes: Casablanca, already highly developed, Tangier surrounding the Free Port and Safi specialising in the chemical industry. As an indication we may add Mohammedia which is devoted to the petroleum industry and where the concession is held by a private company.

Bearing in mind the general aims, the equipment programme for sea-ports during 1965-67 has been laid down as follows:

— Development and modernisation work has been concentrated at Casablanca, Tangier and Safi.

— Certain limited operations are provided for in the case of fisheries, to complete programmes already undertaken (e.g Essaouira).

In all the other ports objectives are limited to maintenance of the potential at its present level.

Content of the programme

Port of Casablanca

The programme is to continue development operations at the capacity already undertaken.

The most important is the completion of the Chaix Mole. Others are concerned with the development of roadways, yards, hangars and tools.

The total of operations already undertaken, after eliminating the less urgent, amounts to 7,020,000 DH. There is a supplementary programme for tool equipment and new improvements amounting to 1,945,000 DH, hangars (500,000 DH) and the construction of a sugar silo (4,500,000 DH). This last is particularly interesting from an economic point of view, since the new silo will allow reception of sugar in bulk and thus does away with the expense of shipping it in bags.

On the other hand the reductions in programmes originally proposed do not permit us to undertake important work for developing the capacity of the port of Casablanca. As a first stage the construction of a new side jetty would cost 20 million DH. Owing to financial restrictions this operation is postponed beyond 1967. Thus the development of traffic may create certain problems towards the end of the period, which might be solved temporarily by putting to other uses the quays at present used for the mineral and coal traffic and by new arrangements for storing phosphate.

At the same time, owing to the development of traffic, we have considered a special programme which we would seek to finance by extra-budgetary means.

All in all, the equipment programme for the port of Casablanca will amount to 13,965,000 DH, that is less than a third of the total equipment programme for sea-ports. To this allocation must be added a credit of 1,000,000 DH for improvements to the Gare Maritime, owing to the anticipated increase in tourist traffic.

Port of Tangier

The industrial development of the Tangier Zone must take place essentially round the Free Port. Equipment work for this Free Zone will be actively pursued: 100,000 m2 of yard, 50,000 m2 of roadway, 5000 m2 of warehouses, connected with the railway, water and electricity systems etc. Apart from this zone the programme for Tangier will comprise the reinforcement of existing works (2,200,000 DH) and the equipment for the new mole (about 2 million).

All together the investments to be made in Tangier port over the period will total 6,000,000 DH.

The development of tourism means that we must also provide for:

— 1,000,000 DH for improvements to the Gare Maritime.

— 4,200,000 DH for a new berth to take one or more car-ferries to be worked by a Moroccan company between Tangier and Malaga.

Port of Safi

Increased activity at Safi will come mainly from increased export of phosphates and the gradual development of the chemical complex. The port is therefore mainly concerned with weighty goods carried by increasingly large vessels which will move by night as well as by day.

The jetty is to be reinforced (1 million DH)

— The basin to the right of the phosphate quay must be dredged to allow access to vessels with considerable draught.

— Buoys must be placed for night use and a tug system created by which large vessels can move at all times and in all conditions in safety.

Moreover the superstructure and tool equipment must be added to according to the demands of traffic.

The whole programme will cost 7,300,000 DH.

Other main ports

The Plan only allows for continuation of work already undertaken at Agadir and Kenitra.

At Agadir we have to reinforce external works, continue the substructure and complete tool equipment. Important operations such as the construction of new external works or the construction of a new hauling slip will not be undertaken under the Plan programme, the total cost of which is 2,700,000 DH for Agadir port.

The port of Kenitra poses a problem. In fact its traffic is quite modest (500,000 tons per year) and the possibility of expansion is slight. At the same time it is difficult of access and this will worsen as the Oued Sebou silts up.

Control of the flow of the Sebou basin, which is in any case necessary, will not be sufficient for many years to make a real difference to the accessibility of the harbour. No doubt it would be possible to stabilise and deepen the channel by constructing jetties etc. But studies with a model have shown that it is idle to hope that

Kenitra can take vessels with more than 8 metres draught. Bearing in mind the constant tendency to increase the size of vessels and the cost of immobilising them, the commercial harbour at Kenitra is condemned in advance. We must therefore now determine how and in what time the port facilities at Kenitra can be reconverted.

Most imports and exports affecting the hinterland of Kenitra have to be effected via Tangier and Casablanca. Only vessels with small draught can continue to use the port of Kenitra. As regards the industrial facilities installed in the port, we must study their future conditions of working with a new supply circuit and the necessary outlets. If necessary some activities could be transferred to the major ports, a corresponding number of jobs being created at Kenitra in industrial facilities independent of the port.

At the same time Kenitra as a whole and the outer harbour of Mehdia enjoy quite favourable conditions for coastal fishing. Resources seem to be abundant and marketing should be favourable in view of the proximity of the main centres of consumption. Fishing and canning could therefore not only survive but develop and increase their exports without great expense, since the draught of fishing vessels is quite small.

For this reason it is not surprising that only maintenance work is provided for in the programme for Kenitra, excluding all final improvements and development of existing installations. The main burden of expenditure consists of dredging at a rate of 1.6 million DH per year, according to experience of recent years. Thus the programme for Kenitra amounts to 6,000,000 DH for the period in question. This figure appears high compared with figures for Tangier and Safi, the importance of which for Moroccan economy is much greater. But at Kenitra large-scale dredging is required every year as long as large vessels are not effectively barred.

Secondary ports

Only fishery development can justify expenditure on these harbours. The programme first of all provides for continuation of work already undertaken. In some cases it is a case of improvement of access (Nador, Al Hoceima, Essaouira). In general substructure equipment and machinery will received some limited complementary assistance.

Two secondary ports deserve attention:

— The port of M'diq was built over the last few years, the total cost of substructure being about 6 million DH. Normally the Plan should consider completing this work.

— Essaouira every year has periods of exceptionally active fishing and at such times the installations are saturated by the number of vessels. The programme should therefore provide for extensions to the fishing harbour for a total of 2,420,000 DH (80,000 DH were set aside in 1964 for extension work).

All in all the three-year programme for secondary ports amounts to 5,435,000 DH. This programme does not provide for important investments at Nador, although the Ministry of Public Works had prepared a programme a programme for extension and equipment for a total of 5,700,000 DH which is obviously desirable. It had to be postponed however owing to the financial squeeze and concentration on the major ports.

Recapitulation

The whole programme for harbours is as follows:

Casablanca	14,965,000 DH
Tangier	11,200,000
Safi	7,300,000
Agadir	2,700,000
Kenitra	6,000,000
Total for major ports	42,165,000 DH
Essaouira	2,420,000
Other secondary ports	3,015,000
Total	5,435,000 DH.
Lighthouses and buoys	600,000
Total for harbour works	48,200,000 DH.

It should be remembered that work at Mohammedia is not included in this programme, since these works, of limited importance during 1965-67, will be carried out by the concessionary company without State participation.

Nevertheless difficulties may arise during the period owing to the fact that the sea-lane at present in service may soon be unusable.

Thus it appeared necessary to construct fixed mooring posts sheltered by a jetty, the cost of which would amount to about 40 million DH and the financing of which would be provided for by borrowing to cover port charges.

The timetable for the budgetary harbour programme would be more or less as follows:

1965	18,095,000 DH
1966	16,965,000
1967	6,940,000 DH

⁂

VI. - **Substructure - Civil Aviation**

We should remember that Morocco gained her independence in 1955 and that transfer to Moroccan responsibility for aviation only took place in 1961.

During the intervening period of six years no long-term projects for equipment were launched. These circumstances together with a rapid increase in demand and the development of aeronautical equipment caused Morocco to fall behind in this respect.

At the same time we should state that :

— on the one hand aircraft and passenger traffic cannot be taken as a basis for determining the amount of investment. These are conditioned above all by the type of aircraft (4-engine, jet etc.) **in service at a given time, day and night, on national and international lines ;**

— at the same time some navigiational aids are located outside aerodromes as well as traffic control facilities, the range of which extends to the whole of Morocco and a wide area of the ocean.

By virtue of the obligations contracted by Morocco as a member of ICAO this general substructure must be constantly perfected in order to conform to standards and meet the requirements of any aircraft even if it never touches down on Moroccan soil.

The present plan has been prepared with a view to austerity and budgetary severity in accordance with the Government's directives.

Only investment intended to increase security over Moroccan territory and on our chief airports have been considered.

Thus we have ignored all improvements of commercial facilities and which only affect the passenger's comfort (air terminals etc.) except for Tangier in view of the increased tourist traffic there.

We have excluded from the Plan installations and equipment of an agricultural nature (meteorology and climatology).

Summary of the Plan :

1. — Aerodromes :

RABAT-SALE : A power station must be installed to feed security units during power cuts.

TANGIER : Since space is clearly inadequate two new berths will be constructed for Caravelles and a terminal allowing for tourist traffic to pass through rapidly.

MARRAKESH : The poor condition of berths means improvement of parking space in the civilian area.

AGADIR : The runway is to be lengthened to take Caravelles and security devices are to be improved.

AL HOCEIMA : Work is of minor importance and is intended to complete what has already been undertaken.

OUJDA : Despite the requests of the companies for lengthening the runway to take Caravelles, we have only considered improvement to security installations.

It is also proposed to set up a radio-wind station in accordance with the plan adopted at the third session of the A.R.I. at Addis Ababa in March 1962.

NOUASSEUR : Certain expenditure will be incurred at the end of the Plan within the framework of work for the final phase (extension of electrical system, telephones and a terminal).

2. — Aeronautical equipment :

The fixed aeronautical telecommunications service has been completely reshaped in Europe and Africa since the numerous meetings, from 1960 onwards, of the various committees of ICAO. It is based on complete automation of signals.

The installations occupied at present by the Regional Control Centre, the Central Telecommunications Office and the Reception Centre are more than 20 years old and cannot be modernised.

We must therefore immediately commence a programme of fresh work to keep Morocco up to international standards.

To this end the Three Year Plan proposes a first batch of installations mainly comprising :

- a Reception Centre, commenced in 1964 ;
- improvement of the transmission centre and partial renewal of transmitters ;
- creation of a new regional control centre and a central telecommunications office which would be finally completed in 1970.

3. — **Meteorological equipment :**

On the one hand we have to complete the synoptic stations of Fkih ben Salah and Ksar-es-Souk provided for at the 3rd. session of the A.R.I. (O.M.M.) at Addis Ababa in 1962 with the necessary equipment and, on the other hand, modernisation of the existing network.

Recapitulation

Bearing in mind these considerations the cost of investment would be 31,000 thousands of dirhams distributed as follows :

1) **Infrastructure :**	
RABAT	1760
TANGIER	2050
MARRAKESH	2000
AGADIR	1800
AL HOCEIMA	300
OUJDA	1600
NOUASSEUR	2680
Meteorological (outside aerodromes)	950
2) **Aeronautical equipment**	11,490
3) **Research and rescue**	300
4) **Met. equipment**	2200
5) **Special vehicules (fire-fighting)**	2500
6) **Aeronautical training**	500
7) **Purchase of land**	370
8) **Costs of surveys**	500
	31,000

Annual distribution is provisionally as follows :

1965	14,035,000 DH
1966	10,405,000 DH
1967	6,405,000 DH
	31,000,000 DH

N.B. — It should be mentioned that the cost of installations and agricultural met. equipment provide for by decision of the Meteorological Conference held at Rabat in 1964 amounts to 2,090,000 DH. Rabat (500), Fez (250), Tangier (250), Equipment (840), Casablanca (250).

⁂

VII. - **Telecommunications**

The PTT equipment programme comprises two parts : telecommunications and post-office buildings. The first surveys of the Ministry led us to propose a three-year programme amounting to 156 million DH, inside which 117 million represented priority projects.

However financial austerity made us limit the programmes to operations which proved most necessary and most profitable with a ceiling of 61,397,000 DH including postal buildings.

In the field of telecommunications this means that, despite the profitability of telephones and telegraphs, normal expansion at the rate charged at present will not be feasible. More exactly it means that requests by private subscribers cannot be satisfied at the present rate (2 months for a telephone and one year for a telex).

As regards post-office buildings this means that we cannot continue our work on behalf of isolated rural districts.

The following programmes have been drawn up with an eye to these stringent measures.

A. — TELECOMMUNICATIONS

I. — Orientation of the programme

The normal growth of demand can be determined from statistical observations over the last few years.

As for the telephone service the bulk of subscription has been rising for the last two years at a rate of 4 % per year. Telephone traffic for trunk calls is dormant compared with the extension of the automatic service. On the other hand dialled calls have risen rapidly : 14.4 % in 1963 and 1964. Normal growth in this category for the 1965-67 period would be about 12-13 %.

The telex service has developed even more rapidly. Subscriptions have risen by more than 15 % over the last few years and normal growth for 1965-67 would amount to around 10-12 % per year. Traffic would develop normally by 20-25 % for inter-zone communication and 8-10 % for international.

In the light of these figures the technical branch of the telecommunications departpment drew up a programme allowing for future traffic and operations which, bearing in mind the traffic forecast, showed a sufficiently high profitability.

Since then the programme has been somewhat reduced corresponding to a voluntary restriction of demand and an increase of the profitability rate.

The supposition that demand will be limited does not affect any traffic concerned with national development, demand from the administration, industry, companies or services. It only affects private demand (one of the forms of final consumption). Moreover it mainly affects telephone traffic and not telex. In this connection we may point out that this restriction of private demand would not be maintained if new subscribers were to bear all the expenditure incurred directly or indirectly by the new connection. This expenditure is estimated at 5000 DH per new line. But at the moment the connection fee is only 170 DH, the remainder being covered by the user only as he pays his regular subscription and his calls.

II. — Content of the programme

Equipment of this category is essentially "capacity equipment". In large towns, corrected forecasts of new subscribers enable us to foresee at what time existing installations will be swamped. Additional installations will be operated in due course as, in the case of Casablanca, NUS, Centre, Maarif etc. and in Rabat (Centre and Souissi).

Outside the towns in rural districts small hand-exchanges can with advantage be replaced by the automatic system for light traffic. It is in fact musch more profitable to use modern automatic equipment the cost of maintenance and operation being very low.

Among operations interesting from the profitability point of view but not indispensable and which therefore do not come under the Plan programme, we may note the modernisation of Casablanca long-distance exchange.

As a final figure, the change-over programme will cost 21,200,000 DH.

2) Subscriber installation and connections

Taking into account the limitation of private connections it is estimated that fhe number of principal subscribers might rise from 86,000 at the end of 1964 to about 99,500 at the end of 1967. To the 13,500 principal subscribers we must add 2500 extra single telephones also chargeable to the State. Bearing in mind the cost of new installations and that of overhead and underground cables, we arrive at the following programme:

Subscriber installations	1,500,000 DH
Overhead lines	3,500,000
Underground lines	4,500,000
Total	9,500,000 DH.

3) Transmission

Equipment provided for under this heading comprises: on the one hand operations of slight or medium importance distributed over the whole of the country according to need, and, on the other hand, two exceptionally important operations in process of completion: the Safi-Agadir cable and the Mediterranean cable Tetuan-Perpignan.

Among the most important operations in the first category we may mention continuation of the construction of the Fez-Sefrou cable (1,300,000 DH), the reinforcement of the Meknes-Oujda axis (1,300,000 DH) and the link between Safi and Marrakesh by Hertzian beam which is to be undertaken at the end of the programme.

The work still to be carried out on the Safi-Agadir cable amounts to 11,400,000 DH. The Mediterranean cable expenses in the Plan come to 37 million DH.

Taken together, these two operations represent 83% of the transmission equipment programme and about half of the total programme for PTT. We should note however that both operations are specially financed thanks to French aid.

The transmissions equipment programme us therefore as follows:

Mediterranean cable	37,000,000 DH
Safi-Agadir	11,400,000
Other links	7,300,000
	55,700,000 DH.

4) Machinery and vehicles

The development of operating services, and above all maintenance, requires new machinery and vehicles which have been estimated at about 600,000 DH in all.

B. — POSTAL BUILDINGS

The total figure for a programme for construction of new buildings has been limited to 4 million DH only, or an annual rate of about 1,300,000 DH. The programme includes a certain number of important operations:

— Regional sub-directorate of PTT at Casablanca: completion of reconstruction work at Agadir. Post-office and telephone exchange at Nador.

The other operations are mostly concerned with construction of post-offices in small rural districts in order to break down rural isolation.

The rate of working will be considerably slowed during the next few years.

Credit for these operations is provided for in chapter VIII of the Plan — "Administrative equipment".

General recapitulation

Change-over	21,200,000 DH
Subscriber installation and connection	9,500,000
Transmission	55,700,000
Machinery and vehicles	600,000
Financial charges	14,830,000
B. — **Postal buildings**	indication
Total	101,830,000 DH
	(44,433,000 DH outside the Plan)

Distribution over the period would be:

1965	22,040,000 DH
1966	23,282,000
1967	12,075,000
1968 and beyond	44,433,000 DH.

P.T.T. — PLAN TRIENNAL 1965 - 1967

Tableau récapitulatif (En milliers de dirhams)

RUBRIQUES	Montant total de la dépense	Echelonnement des crédits			Montant de la dépense	
		1965	1966	1967	Durant le plan	Hors plan
A. — *Opérations déjà autorisées*						
— Centraux	7.750	4.150	1.800	257	6.207	1.543
— Raccordements d'abonnés	3.500	3.500			3.500	
— Transmissions	52.700	10.770	14.982	3.898	29.650	23.050
— Bâtiment (P.M. cf. équipement administratif) ..	P.M.					
Total A	63.950	18.420	16.782	4.155	39.357	24.593
B. — *Travaux nouveaux*						
— Centraux	13.450	2.920	3.400	3.420	9.740	3.710
— Raccordements d'abonnés	6.000		2.400	3.600	6.000	
— Transmissions	3.000	500	500	700	1.700	1.300
— Outillages et véhicules.	600	200	200	200	600	
Total B	23.050	3.620	6.500	7.920	18.040	5.010
C. — *Charges financières* ...	14.830					14.830
Total A + B + C	101.830	22.040	23.282	12.075	57.397	44.433

GLOSSARY

Recapitulatort table — in thousands of dirhams

"Montant total" = total expenditure

"Echelonnement des crédits" = spreading out of credits

"Centraux" = exchanges

"Outillages" = machinery

"Bâtiments" = buildings.

VIII. — Radio/Television

Aim of the programme

The Three Year Plan provides for considerable investment in this field. The effort is justified by the prime part played by these media in the task of informing and educating the masses. It also bears in mind the importance of radio/TV in Moroccan leisure-time and culture.

Aims accepted in the Three Year Plan are as follows:

— First of all to complete the coverage of the territory, especially total coverage by radio.

— Secondly to increase the means of production and to continue the improvement of programmes.

Here again financial restrictions forbid us to consider all operations which are technically desirable.

The choice of a programme has various angles.

— Priority should be given to radio rather than television, owing to the much larger number of sets.

— Wherever present means enable us to meet immediate requirements, modernisation and extension have been postponed until after 1967.

Content of the programme

The chief operations proposed are:

A. — Radio

1. — Establishment of a long-wave national transmitter. This has been agreed in principle for some time. Such a long-wave transmitter can give complete national coverage plus considerable audibility abroad. It can be listened to comfortably day and night with the simplest form of receiver widely distributed over the population. This operation is important technically as well as politically.

The cost has been estimated at 7,400,000 DH.

2. — Extension of the Radio building in Rabat.

This operation was undertaken some time ago. Most of the major work has been done but the essential part of equipment is still to be provided. According to the latest estimates the cost will be 3,000,000 DH.

3. — Methods of radio-reportage

This service is to be developed by the purchase of four transmitting and receiving vans costing 400,000 DH.

4. — Improvement of regional studios.

It is impossible to devote much effort to regional TV studios and these will have to carry on precariously with what they have. Nevertheless facilities at Tangier and Marrakesh are so rudimentary that 300,000 DH will have to be spent.

5. — No provision has been made for medium and short wave transmitters. However, existing facilities in the PTT buildings at Rabat and Casablanca no longer meet the requirements of the service. We shall therefore recover the stations abandoned by foreign troops at Mediouna and Bouknadel. Adjustments for the use of these facilities are estimated at 200,000 DH.

B. — Television

1. — High-power transmitters.

The transmitter network has developed rapidly during the last few years and a large part of the country has coverage. But temporary installations are fast being replaced by high-power transmitters. The following investments are proposed:

Rabat-Casablanca	600,000 DH
Marrakesh	700,000
Zerhoun	600,000
Tangier	300,000
Oujda	1,350,000 DH,

that is to say a total investment of 3,550,000 DH.

2. — Hertzian beam

The transfer of the TV signal to the above-mentioned transmitters is effected by a network of Hertzian beams which are definitely being supplied. It will cost 731,000 DH to complete the work.

Moreover the network will be completed by a network of re-transmitters Safi-Essaouira-Agadir estimated at 900,000 DH.

3. — Construction of a television building in Rabat.

This operation cannot be included in the programme in view of its high cost and the uncertainty which prevails as regards its location It will be necessary to restrict means of TV production to existing studios, the adequate studios in Casablanca and the temporary studios in Rabat This limitation of means of production results from the severity of financial restrictions and the priority granted to sound radio.

4. — Low-power TV transmitters.

Transmitters are required to complete coverage of the territory in areas where, for technical reasons, high-power transmitters do not give complete coverage. The lay-out cannot be decided on until the high-power transmitters are working.

A sum of 600,000 DH has been allocated.

C. — **Miscellaneous operations**

1. — Professional training

The recruitment of technicians and other staff needed by the Radio/TV services demands professional training. Special sections will be created in the professional schools of the Ministry of Education to meet the requirements of PTT and Radio/TV alike. To equip these centres properly the programme assumes a grant of 315,000 DH.

2 — Administrative premises

The development of Radio/TV activities will involve an extension of existing administrative facilities; equipment of new offices will cost 200,000 DH

RECAPITULATION

A. — **Radio**

Long-wave transmitters	7,400,000 DH
Radio building in Rabat	2,000,000
Reportage	400,000
Improvement of regional studios	300,000
Buildings for transmitters medium and short wave	200,000
Total radio	10,300,000 DH.

B. — **Television**

High-power transmitter	3,550,000 DH
Hertzian beam	731,000
Agadir link	900,000
Low-power transmitter	600,000 DH
Total TV	5,781,000 DH.

C. — **Other operations**	515,000
Grand total	16,596,000 DH

The distribution of total expenditure over three years will be:

1965	6,700,000 DH
1966	5,000,000
1967	4,896,000
	16,596,000 DH.

⁂

IX. — National Electricity Office

(O. N. E.)

Part 1° Situation at the outset of the Three Year Plan

The Office at present has at its disposal a considerable potential of power consisting of hydro-electric and thermic stations forming a whole which has the following characteristics:

— For power of hydraulic origin the total installed capactiy, not including auxiliary groups, amounts to 331,750 KW.

— For thermic energy the installed capacity is distributed as follows:
54,000 KW for plants with steam

11,360 KW for plants with diesel engines, figures which do not include auxiliary alternators or steam groups and old-fashioned diesels which should be considered as an emergency reserve.

I. — Characteristics of production potential

The characteristics of annual production potential are as follows:

— Guaranteed productivity, which is the maximum annual demand for power that can be satisfied without any restriction under the most unfavourable hydrological conditions. This is therefore the basic characteristic for the productivity of a production complex which should be able to satisfy the consumer in all circumstances.

— Average hydraulic production, which is the average of hydro-electric power that can be produced annually. This factor actually has only economic significance in so far as it enable us to estimate on an average the contribution to total production which it is possible to demand from hydro-electric production the cost of which, as regards movable charges, is much less than that of thermo-electric production.

— Guaranteed power on the interconnected grid.

A) Guaranteed productivity must be referred to a "peak drought" determined by hydraulic plants other than those of the Oued el Abid complex, on the basic of hydraulic production noted for 1952, when production was at its lowest. For the plants at Bin el Ouidane and Afourer we have adopted the lowest annual production in a three year sequence of poor hydraulic output, taking into account that 1 milliard cubic metres were drawn upon from the Bin el Ouidane dam during this period.

Under these circumstances the annual guaranteed productivity amounts to:

— Work other than that carried out on the Oued el Abid	230 KWH
— Work on the Oued el Abid (including improvements affecting work downstream)	661 KWH
	891 KWH

If we take into account the fact that water has been drawn upstream from certain works for the needs of irrigation, this total must be reduced to about 33 KWH.

To this guaranteed hydraulic productivity, which is an available minimum in exceptional cases, we must add thermic production in connection with intensive working of the 63.7 MW technically available in existing plants to fix the production of electric power that can be ensured in all circumstances with the equipment now in use, i.e:

858 KWH for hydro-electric wirks
+ 400 KWH for thermic works
1258 KWH

The increasing requirements of irrigation will tend to reduce the production calculated above by about 7.5 KWH a year.

To sum up, guaranteed productivity for the three-year period can be fixed at about 1242 KWH.

At the same time, taking the short-term view, for not more than three years and given good hydraulic production in the first year, it is possible to guarantee 100-130 million extra KWH per year.

Under these conditions, given the good hydraulic output in 1964, guaranteed production will be 1380 KWH in 1965-66.

II. — **Forecast for annual consumption and maximum power peak**

When the Three Year Plan was drawn up two rates of increase in consumption and a peak rate were envisaged, that is 5% and 7%. These rates indeed correspond to the increases over the last few years but in view of the results of the first four months of 1964 we thought it advisable to consider as well a rate of 9%. The average rate of 7% means more or less a doubling of consumption in ten years.

Moreover we have added to annual consumption the forecasts for extra consumption when the big plants planned by the BEPI and the BRPM start to operate, since this consumption is not part of regular increase rates.

The tables below record the results of an of 7% increase in the two following cases:

A) The forecast for consumption per year only take into account the connections being made in 1964 (Midelt, Larache).

B) Forecasts also take into account the connections asked for in the future by the BEPI and the BRPM.

Consumption forecast

	Case A	Case B
1964	1242 KWH	1242
1965	1340	1340
1966	1438	1438
1967	1554	1614
1968	1662	1763
1969	1775.5	1973
1970	1899.5	2149
1971	2030	2293

Peak forecast

	Case A	Case B
1964	268 MW	268 MW
1965	296	296
1966	316	316
1967	344	356
1968	368	388
1969	404	434
1970	421	471
1971	451	501

It should be noted that minimum guaranteed power is at present 266 MW and, in view of the good output in 1963-64, 311 MW until January 1966.

PART 2° — 1965-67 PROGRAMME

The equipment requirements of the O.N.E were limited during the last few years as a result of the stagnant demand which could easily be met with the capacity available at the time of independence.

But aftr this reatively favourable period we must now step up our use of equipment both for production and distribution.

In fact, this is what is happening:

— On the one hand there has been a brisk increase in demand, at a rate of 8.5% at present, as regards total consumption and 9% for peak consumption. No doubt this increase cannot be kept up over a long period, but it would be safer to base our medium-term forecast on an average annual increase of about 7% (doubled in ten years — graph. III).

— At the same time means of production and distribution are gradually becoming exhausted, so that satisfaction of demand cannot be guaranteed beyond 1966.

On top of this demand due to increased consumption on the O.N.E grid considerable expenditure has been incurred for repairs and interconnection of the northern system.

The following programme has been drawn up bearing in mind not only necessity but a strict austerity. Thus means of production and distribution might prove insufficient if demand increased more rapidly than we suppose. Also the transport and distribution system is not as secure as might be desired from the technical point of view. In any case the improvement of the situation in the northern zone will have to be ensured in time.

I. — Means of production

We must make a distinction between equipment to be installed before the end of 1969, is which already precisely established, and that which should be installed later on.

a) First instalment of equipment

This comprises in chronological order:

— One 15 MW gas turbine to operate at the beginning of 1966

— One 10 MW gas turbine for the beginning of 1967

— One 60 MW group to be installed in the Roches Noires plant at Casablanca which would go into operation at the end of 1968.

— The hydro-electric equipment of the Mechra Klila dam with power amounting to 23-15 MW Which would go into operation in 1967.

— Installation of a third turbine group at Im Fout with 15.6 MW to go into operation at the end of 1969.

— The hydro-electric equipment of the Bou Areg with 6.5 MW to operate at the end of 1968.

The amount of expenditure during the three-year period would be as follows, in thousands of DH:

	1965	1966	1967	And after
Gas turbine 1°	10.000			
Gas turbine 2°		10.000	1.572	
Roches Noires	17.600	18.000	11.400	7.400
Im Fout	160	3.000	4.000	3.140
Mechra Klila	2.500	5.200	6.740	
Bou Areg	600	2.200	3.000	2.700
Total	30.860	38.400	26.712	13.240

That is an overall total of 95,972,000 DH.

b) Second instalment of equipment.

We cannot at present give an accurate forecast of equipment needed later on. The type of equipment will depend on the choice made between thermic and hydro-electric production. This choice will be determined by the cost and the outlook for production by the different types of equipment and at the same time by the pattern of demand. The distribution of new investments will depend on the rate of growth in demand.

The necessary technical and economic surveys have been undertaken. Pending the results we can indicate here the expenditure to be provided for under the 1965-67 programme in order to apply the new equipment at the right time in two hypothetical cases, that of thermic equipment (plants at El Ouali 25 MW, Dechra el Oued 60 MW, Cheho 85 MW and Mrija 40 MW).

	1965	1966	1967	and after
Thermic hypothesis	—	5000	15,000	110,000
Hydraulic »	1000	15,500	45,000	262,500

II. — Transport and distribution

a) Lines and 150 KV stations.

Most of the main production and consumption centres are linked by a group of 150 KV lines. This system, however, has the following deficiencies:

— Rabat is still supplied from Casablanca at 60 KV and consumption will soon be such that a 150 KV connection will be needed.

— Increased consumption requires the reinforcement of the station at El Ouali, to be carried out in 1967.

— The link between Marrakesh and Agadir is to be completed on the Tensift-Chichaoua stretch. However demand will not require the work to be carried out until 1968 or 1969.

— Connection of the northern zone with the general Moroccan grid requires the construction of a 150 KV line from Rabat to Fondak. This is a most important operation which comprises the setting up of the line itself, extra equipment at the Rabat station and the construction of a 150 KV station at Fondak: Overall expenditure is estimated at 25,900,000 DH.

In view of the amount involved we can consider the steps to be taken if this operation were not carried out under the Three Year Plan Production in Tangier will soon be unable to satisfy demand. It would therefore be necessary to instal extra thermic groups involving an expenditure which might in the first instance be estimated at 10 million DH. Of course this solution will not give the same security or the same quality as a connection with the main grid. Besides, the average cost price of power would be higher since we could not take advantage of cheap power production by existing hydro-electric power-stations. This solution is therefore a question of principle.

With the construction of the line Rabat-Fondak the lines and stations programme would be as follows:

1965	5,650,000 DH
1966	9,750,000 DH
1967	21,520,000 DH
	36,920,000 DH

Without the construction of a line Rabat-Fondak the bill might be reduced by about 4 million DH in 1966 and 6 million in 1967.

b) 60 KV lines and stations.

The programme provides for a set of operations to complete the existing system and to reinforce it where increased consumption will soon saturate the present installations. Feed must, for example, be increased in the following cases:

1° The Safi area for a line Ketrara — Bouguedra — corresponding stations.

2° The Souss valley, where there will be important agricultural consumption, by a line Aït Melloul - Taroudant.

3° El Jadida and Al Hoceima.

4° The Souk-el-Arba area by a line Sidi Kacem - Sopk-el-Arba.

5° The Fqih ben Salah area (connection with the phosphate system).

There will also be extensions to the grid:

— Midelt will be fed from Khenifra to meet the needs of the mining industry (always supposing that the connection proves more economic than the present method).

— The Guercif area, which is being rapidly developed, will be linked to Taza by a 60 KV line.

— The northern zone grid will be linked to the remainder by a line Souk-el-Arba - Larache, which will allow us to reinforce the feed to this area pending installation of the 150 KV Rabat-Fondak line which will later contribute to the security of the feed to the northern zone.

On the other hand the programme does not provide for a complete link from Taza to Taourirt via Guercif. Therefore the security of supply for the eastern part of the grid will not be as complete as could be wished, as long as there is no inter-connection with Algeria. Nor does it provide for a new link between Bouguedra and Safi The extra requirements of the Safi area may be met, if necessary, at the end of the programme by an inter-connection taken in hand by the chemical complex.

The lines and stations (60 KV) programme therefore involves the following expenditure:

1965	25,905,000 DH
1966	11,200,000
1967	6,200,000
	43,305,000 DH.

It will be noted that most of the expenditure is incurred at the beginning of the programme, since most of the operations have already been started in view of the urgency of the demand.

c) Complementary work and renovation of installations already in operation.

There will be numerous operations spread over the whole country. The most important is the installation of three 20 MVAR compensators for the sum of 4 million DH at various HT stations on the grid.

To this current work of the O.N.E must be added the restoration and the improvement of the R.E.I. distribution system which the O.N.E is to operate. In view of the unsatisfactory state of these systems it would be desirable to allocate about 4 million DH a year for works. However the Plan only provides for 3 million DH.

Total expenses will be:

1965	10,077,000
1966	12,377,000
1967	9,000,000
	31,454,000

d) **Miscellaneous**

This item covers administrative overheads and surveys to be marked to equipment operations at 4 million DH a year (about 6% of the amount of investment), i.e a total of 12 million DH.

e) **Financial charges**

Between commencement of work in this programme and operation of the equipment the action of interest on capital while building will burden the contractor with a certain amount of financial charges.

These charges cannot be entered on the working account, since the equipment is not yet in operation. They will therefore increase the installation account.

The amount cannot be stated yet, since it depends on the time taken over the work, on the method of financing and agreements between the O.N.E and Public Fnance concerning equipment. This is only mentioned by the way.

RECAPITULATION

The overall 1965-67 programme of O.N.E is fixed as follows, abiding by the thermic solution for future productive equipment and supposing a 150 KV link with the northern zone.

(in thousands of DH)

Production			
1st. instalment	30,860	38,400	26,712
2nd. instalment		5000	15,000
Transport and distribution			
150 KV	5650	9750	21,520
60 KV	25,905	11,200	6200
Complementary work and renewal	10,077	12,377	9000
Miscellaneous	4000	4000	4000
Financial charges (as an indication)			
TOTAL	76,492	80,727	82,432

That is, for the period 1965-67 we have a grand total of:

239,651,000 DH

These figures do not include rural electrification work carried out by self-financing a special account and by budgetary credits from the public Works, nor the financial charges mentioned above.

This programme would be increased by:

1,000,000 DH in 1965
10,500,000 DH in 1966
30,000,000 DH in 1967

should the hydro-electric solution be adopted for future productive equipment.

On the other hand it would be reduced by 4 million in 1966 and 6 million in 1967 if the inter-connection of the northern zone and the rest of Morocco were not carried out.

CHAPTER VI

MINES – INDUSTRY – HANDICRAFTS MERCHANT NAVY AND FISHERIES

I. – Mining production
II. – Industrial production
III. – Handicrafts
IV. – Merchant navy and fisheries

I. – Introduction

Together with agricultural development, professional training and tourism, the development of mining potential and its rational exploitation constitue one of the chief objectives of the Plan. For some years the country has witnessed an intense mining activity leading to the export of mineral raw materials in demand on the world market, and also the creation of large-scale Moroccan industries like the Safi Complex, based o n the pyrrhotine of Kettara and the Youssoufia phosphates.

Systematic prospection of surface deposits has made it possible to start up large-scale workings which are now supplying minerals appreciated on the world market and play a major part in the economy of the country.

Thus the mining sector supplies 80% in tonnage and 35% approximately in value of Moroccan exports. It employs 30,000 workers and provides a living for more than 150,000 persons.

The most important mineral resource is phosphate rock. Morocco is the second producer country in the world and the first exporter. Phosphates are a State monopoly and are worked by the Sherifian Phosphates Office (OCP) at Khouribga and Youssoufia. They represent more than half the activity of the mining sector and they have a big share in railway traffic, ports and other industrial activity (owing to the materials etc. required).

The expansion of phosphates has been particularly remarkable since 1965. Commercial production will reach 10 million tons (7 from Khouribga — 3 from Youssoufia) and will then increase by 7-8% per year.

Other important minerals are the Djerada anthracite and the crude oil of the Rharb and Essaouira, ferrous metals (especially Ouichan and Imini), non-ferrous lead and zinc ores from Bou Bekr - Touissit - Aouli-Mibladen, Aouam, Tafilalet; cobalt from Bou Azzer, copper from Bou Skour, antimony from central Morocco and non-metallic substances such as barytine, salt and fuller's earth.

The coalfield at Djerada is being radically reorganised, which should make for a gradually increased output. At the same time an effort is being made to sell more coal locally, espacially to thermic stations.

Petroleum prospection, which the BRPM has encouraged by interesting foreign groups, continues in various regions, the Doukkala, Tadla, Tafilalet, the high eastern plateaux and in the Rharb and the Essaouira region, the whole areas producing at the moment. Production is so far limited to 100-150,000 tons, mainly from Sidi Rhalem (Essaouira).

This production is refined at Sidi Kacem, where remaining requirements are made up by importing crude.

The requirements of the Mohammedia refinery are entirely covered by imported crude oil. Together the two plants will treat 1,200,000 tons in 1965 and the increase over the next few years will be 6-7%. The increase in consumption of refined products, mainly affects gas-oil and fuel-oil while petrol consumption is more or less stationary.

Iron ore is produced at Nador, Ouichan and Setolazar. Total production amounts to about one million tons a year and is not likely to vary much in the next few years, barring exceptional circumstances in the international field.

Manganese is mainly produced at Imani and Bou Arfa. The Bou Arfa mine, despite all difficulties, has never ceased working. During the plan period it can turn out between 60 and 100 thousand tons but in any case it may be called a "marginal" mine. Production of ore at Imani has fallen sharply during the last few years, mainly due to international competition. But, despite its unfavourable geographical position, the mine will continue to function and will supply not only metallurgical ore but chemical ore which is much sought after abroad.

Lead and zinc mines, after a period of discouraging prices, are now doing well as a result of a spectacular rise in prices on the world market. The principal deposits at Zellidja - Touissit - Aouli-Bibladen and Aouam, to which we may add the mining province of Tafilalet, should bring production of lead up to about 130,000 tons and zinc to 60,000 a year. There remains the problem of reserves, especially at Zellidja; this mine could easily be relieved by Touissit for zinc and by the Moulouya deposits for lead.

Cobalt production will remain at its present level for some years to come The centre of production has nevertheless been moved from Bou Azzar, worked to a depth of 300 metres, to Aghbar.

Production of copper ore is slightly expanding and has reached a level of about 6-7000 tons of ore coming from the Bou Skour-Azzegour and Djebel Klakh deposits, but, apart from this, highly encouraging prospection and research activities are being pursued in the Ouarzazate and Agadir provinces, where the BRPM is also beginning to work the Talaat N'Oumane deposits.

Special mention should be made of antimony. Favourable prices have permitted the recovery of this mineral, although on a tentative scale, by reviving workings abandoned for the last ten years, and also the production of barytine (100,000 tons) and fuller's earth.

The BRPM is actively pursuing the preparatory work for the Kettara pyrrhotine mine, which will be able to supply the Safi Complex.

These workings do not however represent the whole of Morocco's mineral wealth. Systematic prospection must be carried out in order to make a complete inventory of mining possibilities; for, although surface deposits have been recognised and worked and are now nearing exhaustion, we still need modern methods of prospection to un cover hidden deposits.

In this connection we may mention the recent discoveries of potash, a mineral product of the first order, which could only be found by research at a great depth.

State organisations should, during the next few years, get down to the task of making a systematic and detailed list of mining potential, not only to renew present resources, which are deteriorating with constant working, but above all to increase the mining reserves and the source of power required by the country.

The discovery of new sources of power, especially hydrocarbons, would enable us to supply in interesting economic conditions a cheap source of power which is essential to general economic activity.

At the same time, as regards mining substances as such, research must be carried out not only to keep up exports with a view to obtaining foreign currency but also to give local industry the raw materials needed for its development and, in the case of agriculture, the fertilizer required for better output.

Research and working which existed previously to act as a complement to foreign economies must now satisfy local demand and add value to our own resources.

We must not only safeguard our mining potential but develop it and orientate it in a national sense. Prospection should accompany the development of the country.

⁂

II. – The public and semi-public sectors

I. — MINES AND GEOLOGY DIVISION

1° Mines Division

a) Increase of reserves belonging to groups which are economically weak.

The artisans and miners' co-operatives, especially in the case of manganese, have strictly limited reserves. These co-operatives may well disappear if we do not look for new reserves.

For this purpose 200,000 DH have been set aside in 1965.

b) Obligations arising from the Hydrocarbon Code.

A law of 30.12.61 obliges the Mines Department of Mines and Geology to decide whether the characteristics of the petroleum products distributed are in conformity with regular standards.

Therefore a laboratory has been installed in Casablanca to deal with petroleum products, ores and industrial products.

The partly completed equipment of this laboratory will cost 150,000 DH.

2° Geology Division

Overall activity

During the last few years the volume of activity has increased considerably. Apart from basic work, (mapping, surveys etc.) an effort has been made in favour of decentralisation. Regional Geological Offices have been set up and offices for special study of sedimentary basins, phosphates, geotechnics etc.

Thus the aims of the Three Year Plan will be the continuation of current work, the development of recently discovered sectors and the organisation of new research.

I. — CURRENT WORK TO BE CONTINUED UNDER THE THREE YEAR PLAN.

This concerns the normal activities of the Geology Division which is fully equipped for the task. Thus credits under this heading are only for continuation of current work.

1° Printing of geological maps

Geological maps - scale 1/50,000, 1/100,000 and 1/200,000

These maps represent a synthesis of all geological observations in a given region. They are essential for the improvement of a sector from the point of view of hydrocarbon research, mining prospection etc.

The Plan therefore intends to publish maps with the scales mentioned above in order to complete the series of medium-scale maps already in existence.

a) 1/50,000 maps There are three which particularly concern the provinces of Tangier, Tetuan and the Riff foothills, that is three sheets at 70,000 DH each.

b) 1/100,000 maps. Five sheets for the northern provinces, including Nador and Al Hoceima.

Five are intended for the Rekkame, the high plateaux and the Guercif basin, areas where research is being carried out on hydrocarbons and hidden stratiform deposits.

One is intended for the Phosphates Plateau (Khouribga) and four for the western High Atlas). This means 16 sheets at 70,000 DH each.

c) 1/200,000 maps. Six double sheets concern mainly the Anti-Atlas, a very important region. That is to say, six sheets at 80,000 each.

1/500,000 map of Tarfaya Province

The scheme to complete the geological map of Morocco on this scale did not [illegible]ude Tarfaya.

Publication o[illegible]cial maps

This includes maps prepared from a different angle corresponding to modern technology. The geotechnical maps covering an important industrial town or area are to be used by the greatest possible number of professional teams.

Metallogenic maps deal with wide spaces and are indispensable for specialists and enable them to make a synthesis of known facts.

Finally maps of mineral deposits allow for the same type of work as above.

Geophysical maps

The Geology Division is at present establishing a general gravimetric maps covering the whole of Morocco. These maps, which exist in most European countries, show up the main structural characteristics and enable us to direct further research, especially for hydrocarbons.

Aerial photographs and the establishment of a topographic pool

In order to establish geological maps for the Plan period we must establish a topographic pool and take aerial photographs wherever cover is insufficient or out of date.

Moreover these documents, brought up to date, will assist other sectors of the economy such as the Public Works, agriculture etc.

Work is concerned with:

In the south: Ouarzazate and Tafilalet
In the north : Al Hoceima and Nador.

RECAPITULATION

Geological maps 1/50,000, 1/100,000 and 1/200,000	1,810,000 DH
1/500,000 maps of Tarfaya	50,000 DH
Special maps	480,000 DH
Geophysical maps	60,000 DH
Aerial photographs	250,000 DH
Total	2,650,000 DH

2° Publications

For nearly 40 years the Geology Division has been issuing scientific works on the whole of geological and mining activity in Morocco. This increases Morocco's prestige abroad.

The chief publications are:

— Discussion of the stratiform deposits of Morocco

— A memorandum on Tarfaya

— Explanations of the geotechnical maps of Fez, Safi and Mohammedia.

— Memoranda on mineral deposits in the region of Oujda, the High Atlas, the Anti-Atlas and the Djebilet.

— Explanations of geological maps already issued (Sheet Bou Arfa, Figuig, Sidi Kacem, Doukkala.

— Descriptive monographs to accompany geological maps and articles concerning the Riff and other regions.

Proposed undertakings	660,000 DH
Mines and Geology	120,000 DH
	780,000 DH.

3° Study of sedimentary basins

During the last few years a Sedimentary Basin Research Office has been formed. It has to carry out stratigraphic, structural and geo-physical surveys and describe the outlook for prospection of hydrocarbons, potash and hidden deposits. It deals with:

— The High Plateaux, the Guercif basin and the Mouluya, Bahira and Tadla.

As regards the Three Year Plan it remains to prospect the Ouarzazate basin, the Souss, and the Gareb.

Provinces of Nador and Al Hoceima and the Triffa Plain.

Recapitulation

Survey of the basins (Haouz, Ouarzazate) and supplementary geophysical work on basins already surveyed . . . . . . 2,800,000 DH.

4° Geophysics in general

Extra gravimetric activity will be required to edit gravimetric maps on the 1/200,000 scale.

Tests, methods and purchase of equipment

Before undertaking a long and costly geophysical campaign it may be necessary to make method tests. These tests necessitate the purchase of certain specialised equipment.

Geophysics to assist mining work

Aerial geophysical prospection already carried out enables us to delimit certain preferential zones on which supplementary work must be done, either with the Division's own funds or through specialised firms. This is mainly a question of anomalous situations discovered in the central Jebilet, the Rehamna area, central Morocco etc.

Recapitulation

General geophysics	210,000 DH
Geophysics applied to mining work	500,000 DH
	710,000 DH.

5° Prospection of mineral deposits

Prospection with a berylliometer

Beryllium forms part of metals which during the last few years have passed, almost without transition, from the laboratory to the industrial stage. Numerous applications in ultra-modern science (nuclear energy etc.) have increased the demand. Geologically speaking Morocco is a potential producer of basic ores. The latest prospecting techniques have been perfected and will be applied by the S.E.G.M in various regions.

Alluvial prospection

Alluvial prospection, although little applied in Morocco, can give rapid and interesting information in areas such as El Aioun, for example.

Mining soundings

This is intended to verify officially the hypothesis based on the prospection and surveys of the S.E.G.M. This is particularly the case in Rekkan, where an experimental geological sounding will be carried out after two years' work in the hope of discovering deposits of lead and zinc.

Shafts and trenches

These form part of prospecting work. They can rapidly ascertain the conditions of a deposit.

Recapitulation

Berylliometer prospection	60,000 DH
Alluvial prospection	60,000 DH
Soudings	580,000 DH
Shafts and trenches	150,000 DH
	850,000 DH.

6° Laboratory work

This heading comprises work in the S.E.G.M laboratories and is intended to determine the exact nature of samples presented by geologists and prospectors. Various methods are used. Spectrography, for example, enables us to detect rapidly the constituents of the material even with very slight traces. The results of this work will certain influence the future orientation of research.

RECAPITULATION

Spectrography	50,000 DH
Chemistry and mineralogy	150,000 DH
Chemical laboratory	50,000 DH
	250,000 DH.

Initially the Rubidium/Strentium method will be used, later on the K40/A40 and lead methods.

Estimate

Consolidation of the installation. Supplementary test with lead 200,000 DH.

4° New constructions

Laboratory and geochronology

It is impossible to instal this in the Ministry's premises and the buildings placed at our disposal have been taken over by the Army. Although we have found a temporary solution with pre-fabricated buildings, we must nevertheless urgently house the electronic equipment which we possess.

The overall project needs distributed as follows:	160,000 DH
1st. instalment - Solid construction of the geochronological laboratory to replace pre-fabricated buildings	70,000 DH
2nd. instalment - Arrangement of existing buildings	90,000 DH
	160,000 DH.

III. — New sectors which can be contemplated on the occasion of the Three Year Plan

1st. Geochemical prospection

This is a particular method of research. It has not so far been perfected save for a certain number of substances (lead, zinc, copper for example). What we underséand by large-scale geochemistry is the search for anomalies over large areas by taking widely spaced samples, the results of which may be promising for future prospection. On the other hand detailed geochemistry has to determine, in a definite area and for definite minerals, the exact location of rich deposits.

At the same time we can envisage the issue in some sectors of Morocco of a basic document giving values for general geochemistry. These are the metallometric charts which will pave the way for more detailed prospection.

Recapitulation

Detailed geochemistry	200,000 DH.

I. — PROGRAMME AND PROVISIONAL BUDGET

Introduction

The action of the BRPM during the period will be pointed in three directions:

— Petroleum research
— Specific projects
— General research

This action will bear in mind two main ideas:

— To profit from the considerable investments already made by the State, through the BRPM, in mining research over the last few years. This will have to be done by association with private capital which will relieve to a certain extent the effort made by the State.

— To try to undertake whenever possible any new activity in association with private interests. This will probably apply to a part of the programme headed "General Research", but it nevertheless concerns the whole of petroleum research.

Attached to the BRPM's programme of normal intervention there are some projects of great interest but of an exceptional nature, either because of their scope or because of the uncertainty as to the form they will finally take. This manner of presentation does not mean that these projects must be removed from the budgetary schemes of the State, but the problem of financing each project will have to be solved separately at the right time independently of the BRPM's own programme.

These projects are as follows:

— Equipment programme for working the Kettara pyrrhotine and participation of the BRPM in the Safi Complex.

— Société de Transport des Minerais: transport of iron ore from Gara Djebilet.

— Lead foundry - Zinc.

A. — Petroleum research

The State has recently decided to develop this activity by a systematic prospection of sedimentary basins.

In order to lessen the risks of research the BRPM has appealed to foreign investment. It has signed conventions the general principle of which are to make private investors bear 80% of research, the remaining 20% being the responsibility of the BRPM.

At the same time, in the case of discovery of a deposit which is commercially workable, the foreign investor will hand over gratis to the BRPM 30% of work carried out, so that the State and the investor are on a fifty-fifty basis in the working company.

Moreover the conventions signed by the BRPM stipulate that drilling work will be carried out by the State.

It should be noted incidentally that the BRPM's share of 20% can be further reduced by the fact that this includes work previously done by that organisation, as well as the preparatory geological work done by the Mines Department.

It can be definitely stated that State liability for investment in petroleum research is slight compared to the private investment provided for.

We therefore propose to continue current exploration while giving priority to research to be carried out under the convention already in force, the BRPM being legally required to follow its foreign partner.

— Convention with PETROFINA (Draa and Sebou)
— » » PREUSSAG (Doukkala)
— » » CANDEL (Ksar-es_Souk)
— » » AGIP (High Plateaux)

Further conventions are provied for for the exploration of the Guercif and Beni Mellal areas.

Other zones remain to be prospected: Matarka, Larache, Ouarzazate: the BRPM will undertake some research here.

As regards the sums to be devoted to petroleum research the following remark should be made:

If the BRPM, to finance its investments (petroleum etc.), should only have available 10 million DH per year on an average during the Three Year Plan period, it would only have left, to finance its share of the other ventures, the following sums:

In 1965 : 2.46 million DH for a total of investment of 25 million
In 1966 : 2.66 » » » » 23.5 »
In 1967 : 4.00 » » » » 20 »

Total: 9.12 » for the three-year period.

Our partners' current projects and a revision of our calculations regarding our shares gives a distribution as follows :

1966 : 3.28 — -)
1967 : 1.80 — - (fort the same sums invested
1965 : 4.04 million DH)

Details of research provided for are given below and repeated in the attachedtable.

a) **Sebou permits**

The proposed extra clause in the BRPM-PETROFINA (10-90) convention regarding the Sebou permits provides for a minimum expenditure of 5 million DH for a period of two years which may be extended.

1965 :

— First phase, a seismic campaign of three months	0.9 million DH
— Geochemistry and geophysical re-interpretation	0.1 — -
— One compaign with 5-6 drillings	3.0 — -
	4.0 million DH

1966 :

— Geology	0.8 million DH
— Seismic	0.9 — -
— Drilling	3.3 — -
	5.0 million DH

1967 :

— Geology	0.6 million DH
— Drilling	3.4 — -
	4.0 million DH
Total for three years	13.0 million DH

These figures are only for exploration.

In case of a discovery being made, development shafts will be required but financial figures cannot be given for the moment.

b) **Doukkala permits**

Permits governed by the BRPM-PREUSSAG (20-80) convention.
Minimum expenditure estimated at 10 million DH
Maximum expenditure estimated at 20 million DH.

1965 :

Supplement for geology-geophysics	1.2 million DH
1 extra drilling (3rd.)	7.0 — -
	8.2 million DH

1966 :

— Geology	0.3 million DH
— Geophysics	0.6 — -
— Drilling	5.0 — -
	5.9 million DH

1967 :

— Renewal of activity with two months seismic	0.6 million DH
— Geological interpretation	0.1 — -
— 1 medium drilling	3.0 — -
	3.7 million DH
Total for three years	17.8 million DH

c) High Plateaux permits

— Convention BRPM-AGIP (20-80)	
— Financing	12.5 million DH
— Pre-convention expenditure	2.25 — -

1965 :

— Supplementary geology	0.8 — -
— (6 months seismic)	1.8 — -
— 1st. deep drilling (2500-3500 m.)	4.6 — -
	7.2 million DH

1966 :

— 7 1/2months seismic	1.2 — -
— 1 medium drilling	3.8 — -
	5.0 million DH

1967 :

— Geology	0.4 — -
— **Geophysics**	0 — -
— Drilling	2.4 — -
	2.8 million DH
Total for three years	15 million DH

d) **Ksar-es-Souk permits**

BRPM-CANDEL convention (20-80) Allen. Richfield
Minimum financing : 10 million DH
Maximum financing : 16.6 million DH.
Beyond this point the BRPM's share will longer be 20 % but 50 %.

1965 :

— Re-interpretation of geological results and geophysical campaign	2.3 million DH
— Drilling (palaeozoic)	3.3 — -
	5.6 million DH

1966 :

— Detail seismic	0.8 million DH
— 1 drilling	2.2 — -
	3.0 million DH

1967 :

— Geology	0.5 million DH
Total for three years	9.1 million DH

e) **Guercif permits**

A 20-80 convention is proposed. Concentration on Guercif-south.
Maximum expenditure estimated : 5-10 million DH.

1966 (Guercif-south)

— 2 months geology	0.3	million DH
— 2 months geophysics	1.6	— -
— 1 drilling	2.7	— -
	4.5	million DH

1967 (Guercif north)

— 2 1/2 months geology	03.	million DH
— 3 1/2months geophysics	1.0	— -
— Drillings (one deep, one medium)	4.0	— -
	5.3	million DH
GRAND TOTAL	9.9	million DH

f) **Beni Mellal permits**

BRPM's own permits : no convention is being negotiated.

Should there be a convention we must allow for :

1967 :

— 1 month geology	0.4	million DH
— 3 months seismic	0.9	— -
— 1 medium drilling	2.4	— -
	3.7	million DH

B) Specific projects

The research work done by the BRPM over the last few years led to the discovery of important deposits for which extra financing will be necessary before working can begin.

These deposits are as follows :

- — The Moulouya lead deposit near Midelt (11 million tons of workable reserves)
- — The lead, zinc, silver and gold deposits at Bou Madine (south of Tinjdad)
- — The potash deposits at Khemisset
- — The fluorine deposits at El Hammam.

The working of these deposits must take place in association with private partners and means that we shall be able to relieve the deposits at present on the point of exhaustion, such as Zellidja, Aouli and Imani.

The tables corresponding to each project and the recapitulatory table have three headings :

- — Studies and research
- — Preparatory work
- — Equipment for working the deposits.

The advantage of this form of presentation lies in the fact that the first two headings show the expenditure which it will be impossible or very difficult to finance by borrowing. On the other hand, the work of exploitation and equipment should normally be financed by appealing to the financial market. The first two headings give an overall representation of the establishment costs for specific projects which will be financed by the BRPM and its possible associates.

It is felt that association should be on a theoretical 50/50 basis of participation in the capital of the working company. Obviously, if the Moroccan Government's participation amounted to more than 50 % of the capital, this would increase the BRPM's share in the financing.

Material credit will not be taken into account since the expenditure accepted in the provision for investments amounts to a payment credit.

Lead-Moulouya

The interpretation of the information is based on studies and work carried out for more than five years. Bearing in mind the improvement in lead prices, we must consider the equipment of the mine and the washery during the two year period 1965-66. Working might begin in 1967.

Present forecasts are given in table 1.

Total investments amount to 6.5 million DH for 1965, which corresponds to the portion already financed by the BRPM up to date, also 7.5 million in 1966, 0.5 million of which will constitute supplementary research to be carried out by the BRPM, bringing the final portion financed by the latter up to 7.5 million DH.

Bou Madine

The expenses incurred by the BRPM at Bou Madine amount at present to 3 million DH. On the basis of an association with the working company, the private partner should contribute an equivalent sum so that the BRPM would have no expenses in 1965. For subsequent years the BRPM would be charged with a sum of 0.5 million DH in 1966 and 1.25 million in 1967, that is to say an investment of 1.75 million in three years of a total of 9 million.

The portion reserved for borrowing covers the sums which will be called upon in 1967 for exploitation equipment, i.e. 2.5 million DH.

Potash at Khemisset

The provisions of the Three Year Plan will be based on the new pattern of research and on the exploitation of a sylvinite deposit of about 50 million tons with an average content of 11 % K20.

A preliminary profitability study indicates provisionally that the workings will show a profit. Thus this future exploitation, owing to its annual turnover of 40 million DH, will be classed among the biggest projects in the country.

The first researches undertaken by the BRPM under the Compagnie des Potasses des Zemmours agreement, in association with the Mines Domaniales des Potasses d'Alsace, were for the account of the BRPM itself. Sums expended to date are about 7 million DH. The BRPM possesses 57 % of the capital in the research company. The amount of investment (about 90 million DH) necessitates an association with private capital which, it is throught, should be on a fifty-fifty basis.

The portion chargeable to the BRPM from 1965 to 1967 is 7.5 million DH. This forecast presupposes that the private partner will take part as from 1965, which seems rather uncertain. if this intervention does not take place until later, BRPM expenditure would increase by 2.25 million in 1965, at the same time reducing the financial charges for the following financial years.

Recourse to borrowing can only be limited since the intensive equipment phase will not have begun before 1968.

El Hammam

The BRPM's participation in the SAMINE company, which works the El Hammam deposits, amounts to 34 % of the capital. Funds chargeable to the BRPM under research and preparatory work, amount to 11 million DH for the Plan period. Since the BRPM is associated with the foreign company we may suppose external borrowing to the extent of 3 million DH.

Irhem

The sum of 0.70 million DH for Irhem represents the working account corresponding to the financing of the start-up in January 1965. The washery is due to start up at the beginning of the year.

Prévisions d'investissement et de financement

Plomb-Moulouya

(en millions de DH).

Années	Etudes et recherches	Equipement minier	Equipement laverie	Logements	TOTAL	Financement		
						Fonds B.R.P.M.	Fonds privés	Emprunts
1965	0,5	2 (a)	2 (b)	2	6,50	0,50	6	—
1966	0,5	4 (c)	2	1	7,50	0,50	1,50	5,50
1967	—	—	2	—	2	—	—	2
TOTAL	1	6	6	3	16	1,00	7,50	7,50

Dépenses B.R.P.M. arrêtées à fin 1964 : 6,50 millions de DH.

(a) 2 millions de DH sur des engagements en 1965 de 5 millions de DH.
(b) 2 millions de DH sur des engagements en 1965 de 10 millions de DH.
(c) dont 3 millions de DH payés en 1966 au titre des engagements de 1965.

Prévision d'investissement et de financement

Bou Madine

(en millions de DH.)

Années	Recherches	Prépara-toires	Equipement	TOTAL	FINANCEMENT		
					Fonds BRPM	Fonds privés	Emprunts
1965	1,5	—	—	1,5	0,8	0,7	—
1966	2,5	—	—	2,5	0,5	2	—
1967	0,5	2	2,5	5	1,25	1,25	2,5
TOTAL .	4,5	2	2,5	9	2,55	3,95	2,5

Prévision d'investissement et de financement Potasse

Khémisset

(en millions de DH.)

Années	Recherches	Etudes	Préparatoires	Equipement	TOTAL	FINANCEMENT		
						Fonds B.R.P.M.	Fonds privés	Emprunts
1965	3	0,5	—	—	3,5	3	0,5	—
1966	3	0,5	2 (a)	1 (b)	6,5	3,25	2,25	1
1967	3	0,5	3,5	1	8	3,50	3,50	1
TOTAL .	9	1,5	5,5	2	18,0	9,75	6,25	2

(a) Le fonçage du puitsd'extraction débutera durant le 2ème semestre 1966

(b) Les engagements pour achat de matériel sont de l'ordre de 5 millions de DH en 1966.

Prévision d'investissement et de financement

El Hammam

(en millions de DH.)

Années	Etudes et Recherches	Préparatoires	Equipement	TOTAL	FINANCEMENT		
					Fonds B.R.P.M.	Fonds privés	Emprunts
1965	0,20	0,80	0,50	1,50	0,50	1	—
1966	—	1	2,50	3,50	0,35	0,65	2,5
1967	—	0,50	0,50	1,00	0,15	0,35	0,50
TOTAL ..	0,20	2,30	3,50	6,00	1,00	2,00	3,00

PREVISIONS D'INVESTISSEMENT ET DE FINANCEMENT DES PROJETS SPECIFIQUES

(Récapitulation)

(En millions de DH)

Années	KHEMISSET Potasse			MOULOUYA Plomb			BOU-MADINE Pb-Zn-Ag-Au			EL HAMMAM Fluorine			IRHERM cuivre	Total	FINANCEMENT		
	ER	Pr	Ex	ER	Pr	Ex	ER	Pr	Ex	ER	Pr	Ex	Fonds de roulement		Fonds BRPM	Fonds privés	Em-prunts
1965 .	3,5	—	—	0,50	—	6	1.5	-	—	0.20	0.8	0.5	0.7	13.70	5,50	8,20	—
1966 .	3.5	2	1	0,50	—	7	2,5	-	--	—	1	2.5	—	20.00	4,60	6,40	6
1967 .	3.5	3.5	1	—	—	2	0.5	2	2.5	—	0.5	0.5	—	16.00	4,90	5,10	9
Total.	10.5	5.5	2	1	—	15	4.5	2	2.5	0.20	2.3	3.5	0.7	49.70	15,00	19,70	15

E.R. : Etudes et recherches

Pr : Préparatoires d'exploitation

Ex : Equipement pour l'exploitation

Estimates for investment and financing of specific projects

(Five tables)

GLOSSARY

(In millions of DH)

"Equipement laverie" = washery equipment

"Logements" = housing

"Equipement exploit." = operating equipment

"Emprunt" = borrowing

E.R. = studies and research

Pr = preparatory to operation

Ex = Operation equipment.

C) General research

Pursuit of research by mining work and soundings on numerous indications in Morocco is an absolute necessity for the maintenance and, if possible, the reinforcement of mining potential.

This heading only shows in principle the research work proper carried out on the basis of insufficiently known indications. This research is intended to determine whether deeper and more costly work, preparatory to working the deposits, is justified or not. The cost of such preparatory work, which, in favourable circumstances, would follow research work proper, has not been taken into account. It has been supposed that the work could be financed by private funds.

However, in some cases, financing by the BRPM itself could be justified over and above the provisions of the Plan, if interesting discoveries were made for which private capital was not available.

Research will essentially concern the following metal sand substances :

- Lead - zinc - silver
- Potash
- Copper.

Besides, there will be an item marked " miscellaneous " to take into account research on indications of manganese, antimony, asbestos and other useful substances.

It will be seen that no research has taken place on iron ore. In fact, considerable inventory and study work has been done over the last few years and the problems, as far as we know at present (1), are rather economic problems affecting the start-up of operations than research problems. However, some supplementary studies are provided for under " miscellaneous ".

It will also be noted that general research proposed herein concerns in principle the mining sector belonging to the BRPM, excluding research carried out by subsidiaries, which would normally be financed from private funds.

---

(1) The results of the aerial magnetism compaign carried out in 1964 over a large area in central Morocco may encourage further research.

1° Lead - Zinc - Silver

The indications of lead and zinc are numerous in Morocco and, despite a good deal of research already carried out, there are still serious chances of discovering new workable deposits.

Among the indications on the basis of which research programmes will be carried out we find the following :

- Limestone backbone of the Riff (Tetuan Province)
- Beni Maden deposits (d°)
- Ante-riff miocene (Fez)
- Immouzer des Marmoucha (d°)
- Foum Jerar deposits (Tafilalet)
- Various indications in the High Atlas (d°)
- Silver deposits at Zgounder (Ouarzazate)
- Various indications in the Djebilet and the High Atlas (Marrakesh).

Expenditure on research has been kept at the level of 1.8 million DH for each of the three years. It is impossible for the moment to give details of the distribution. However, a distribution by provinces has been attempted.

2°) Potash

Apart from the special effort to be made in the Khemisset basin, which is already well known, it is intended to carry out research on two other basins in so far as private investment is forthcoming. This involves the Doukkala basin and that of Berrechid. It is assumed that investments will be wholly financed by private capital up to 9.6 million DH, the BRPM being only charged with 0.9 million in 1965.

3° Copper

The indications of copper are situated in the following areas :

Tafilalet (Anti-Atlas)

a) Research is intended in the Alnif sector in 1964-65 in association with a foreign group.

b) Apart from this research in the Oumjerane sector will be renewed in 1966.

Ouarzazate (Anti-Atlas)

Research is to take place in 1965 in the Sirous massif.

Marrakesh (Djebilet)

Research on the cupriferous deposits linked to pyrrhotine will be continued in 1965-66.

Agadir (Anti-Atlas)

Apart from exploitation of Irhem a continuous effort will be made with numerous indications of copper in this province.

4° Miscellaneous

This heading covers mainly :

a) Work on antimony in Meknes province

b) Research on manganese in Oujda province

c) Research on precious metals, beryl, useful substances and and asbestos, as well as work on manganese in the province of Ouarzazate.

⁂

B.R.P.M. : Prévisions d'investissements pour les Recherches Générales (en M. DH)

	Plomb - Zinc Argent	Potasse Doukkala Berrechid	Cuivre		Divers (e)	TOTAL	Financement B.R.P.M.
			Anti-Atlas	Djebilet			
1965	0,8	1,5 (d)	1,20 (c)	0,6	0,7	4,80	3,40
1966	1,8	4	1,00	0,4 (b)	0,5	7,70	3,50
1967	1,8	5	0,7	(a)	0,5	8,0	3,0
TOTAL .	4,4	10,5	2,90	1,0	1,7	20,50	9,90

a) Début des travaux préparatoires et d'équipement en fonction des résultats obtenus.

b) Dont 50 % à la charge du B.R.P.M.

c) Dont 1,00 à la charge du B.R.P.M.

d) Dont 0,9 à la charge du B.R.P.M.

e) Divers : Spath-fluor - Antimoine - Manganèse substance utile (calcaires - argiles)

B.R.P.M. — TABLEAU RECAPITULATIF GENERAL
DES PREVISIONS D'INVESTISSEMENTS (en M. DH)

Années	Hydrocarbures	PROJETS SPECIFIQUES					CEMR	RECHERCHES GENERALES				Total	FINANCEMENT		
		Potasse	Moulouya	Bou-Madine	El Hammam	Irherm		Pb-Ag	Potasse (a)	Charbon Spath	Cuivre divers		Fonds BRPM	Fonds privés	Emprunts
1965 ...	24,85	3,5	6,50	1,50	1,50	0,7	P.M.	0,8	1,50 (1)	0,2	2,30	43,35	13,00	30,35	—
1966 ...	24,90	6,5	7,50	2,50	3,50	—	P.M.	1,8	4	P.M.	1,90	52,60	11,70	31,90	9
1967 ...	17,80	8	2	5,00	1	—	—	1,8	5	—	1,20	41,80	10,30	25,50	6
Total ..	67,55	18,0	16,00	9,00	6,00	0,7	—	4,4	10,50	0,20	5,40	137,75	35,00	87,75	15

a) Berrechid - Doukkala.

1) Dont 0,90 à la charge du B.R.P.M.

TABLEAU PR 1

PLAN TRIENNAL 1965 - 1966 - 1967

TABLEAU DE LA REPARTITION DES INVESTISSEMENTS PAR PROVINCE

(En millions de DH)

H - Hydrocarbures ; P.S. - Projets spécifiques ; R.G. - Recherches Gles

PROVINCES	1965	1966	1967	TOTAL
Rabat .... H PS	4 3,5 } 7,5	5 6,5 } 11,5	4 8 } 12	31
Tétouan ...... H RG	0,0 0,4 } 0,4	0 0,5 } 0,5	0 —	0,9
Oujda .... H RG	7,2 0,1 } 7,30	5,00 0,10 } 5,10	2,6 —	15,20
Taza .... H	0	4,6	5,3	9,9
Fès .... RG	0,3	0,50	0,70	1,50
Meknès .... RG	1,7	3,7	1,5	6,90
Tafilalet ..... H PS	5,6 8,0 0,25 } 13,85	3 9,50 0,80 } 13,30	0,5 7 0,7 } 8,2	35,35
Ouarzazate ... H RG	— 0,6	0 0,3 } 0,30	0 0,10 } 0,10	1,0
Béni-Mellal ... H	0	0	3,7	3,7
Casablanca .. RG	0,5	4	5	9,50
Marrakech .... H RG	8,2 1,8 } 10,0	5,9 0,5 } 6,4	3,7 0,3 } 4	20,4
Agadir ..... RG	1,2	0,5	0,7	2,40
Total général ..	43,35	50,40	44,00	137,75

Investments by provinces

H = Hydrocarbons; PS = Specific projects; RG = General research.

GLOSSARY

"Prévisions d'investissements" = provisional investment for general research

"TABLEAU DE LA REPARTITION DES INVESTISSEMENTS" = INVESTMENT BY PROVINCES.

D) Distribution of investment by provinces

The attached table shows the distribution by provinces. For further details please refer to the commentary on hydrocarbons and on general research.

As for specific projects they are distributed by provinces as follows :

— Potash	(Rabat province)
— Moulouya	(Tafilalet)
— Bou Madine	(d°)
— El Hammam	(Meknes)
— Irhem Copper	(Agadir)

E) Exceptional projects

1. — The BRPM's role in the Safi Chemical Complex

This part of the BRPM's activity began in 1959 on instructions from the Government in order to supply the Complex with sulphur. On a legal and financial basis established between the BRPM, OCP and BEPi, the BRPM was to carry out research on the Kettara pyrrhotine and found a working company. The latter was to feed the complex at current prices. The BRPM, as contractor for the promoters of the Complex, was, by may of compensation for its services, to be associated with the working company. Conversely the BEPI and the OCP would participate in the Kettara company.

N.B. 1. — One might add for Marrakesh province the expenditure for the Kettara mine. No account was taken of the BRPM's subscription to increasing the capital of the CEMR (4.5 million DH).

N.B. 2. — It should be noted that the provincial distribution corresponds to the total public investment and private investment involved in association with the BRPM.

The present situation

The pyrrhotine working company was constituted in November 1964. The company's capital was fixed at 20 million DH distributed as follows :

— BRPM	11.1 million DH or 55.5 %
BEPI	4.2 million DH or 21 %
OCP	4.2 million DH or 21 %
CMM	0.5 million DH or 21 %

Participation by the BRPM and the CMM comes from the contribution in kind resulting its activities.

Participation by the BEPI and the OCP consists of subscription in kind amounting to 8.4 million DH.

Total investment needed for the start-up of exploitation in the final phase is estimated at 42 million DH. Financing is provided for as follows :

- Capital : 20 million DH (17 million of which has already been spent the BRPM in equipment work)
- Borrowing for 1965 : 16 million DH.
- Auto-financing and supplier credit : 6 million DH.

It should be noted that the SEPVIK company, as from its effective working, owe the BRPM a sum of about 6 million DH representing the difference between BRPM expenditure (17 million DH) and its participation in the company.

2. — Financial programme for Kettara

Production will begin in 1965 and will reach a normal level in 1967. The investment programme is shown in the following table (in millions of DH).

⁂

B.R.P.M. : Dépenses d'investissement de Kettara

Années	Préparatoires	Matériel		Génie Civil infrastructure	TOTAL	Financement Emprunt (1)
		Minier	Laverie			
1965	3,15	1,48	1,58	2,90	9,11	10 (2)
1966	1,00	1,50	0,67	1,00	4,17	5 (2)
1967	1,00	0,88	0,15	0,80	2,83	1 (3)
Total	5,15	3,86	2,40	4,70	16,11	16

---

1) A partir de 1965, il ne sera recouru qu'à l'emprunt, la Société étant supposée constituée et le capital intégralement souscrit.
2) La différence entre les ressources (emprunt) et les paiements soutiendra la trésorerie en début d'exercice.
3) Court terme.

GLOSSARY

"Laverie" = washery

"Génie civil" = civil engineering

"Emprunt" = borrowing.

3. — **BRPM participation in the Safi Complex**

For the reasons given above the BRPM will take up financial participation in the Complex working company. The percentage will be fixed later on when the structure of the company is better defined.

II. — **" Société de Transport des Minerais "**

This project comes under the Three Year Plan. As soon as the present difficulties are properly overcome, the SOTRAMI company could take over the execution of its plan. The BRPM's share in the investments which would be provided for by this company would amount to a total of 50 million DH distributed as follows :

— 2.5 million DH the first year
— 20 million DH the second year
— 27.5 million DH the third year

for a participation of the Moroccan State of 50 % in the company.

In any case the project is important enough to justify an exceptional decision by the Government when the time comes.

III. — **Lead-zinc foundry**

Like the preceding project, this one comes under forecasts for the Plan established last year. A study company to be created shortly will continue the work and studies already undertaken by the Mines Department, the BRPM and the BEPI. Should the result be positive, a working company could be created in participation with private lenders.

Technical data on the project are indicated in the section "Industrial Production ".

The overall cost of investment would be about 90 million DH. The capital could be about 30 % of investment, i.e. about 25 million DH. BRPM participation could amount to 25 % of the capital (that is half public participation, the same participation being provided for by the BRPM.

THE SHERIFIAN PHOSPHATES OFFICE (OCP)

1. — Evolution of sales forecasts

Year	Initial forecast	Present forecast
1964	8,500,000 tons	10,000,000 tons
1965	8,850,000 tons	11,000,000 tons
1966	9,200,000 tons	12,000,000 tons
1967	9,580,000 tons	13,000,000 tons
Total	36,130,000 tons	46,000,000 tons

that is to say an increase on the programme of 9870 tons or 27 %.

The first forecasts were based on a provisional study for the period 1963-73 or ten years, supposing an annual expansion of about 4 %. This rate, which is very moderate having regard to what it was during the last ten years 1952-62 (7 % took into account the fact that the figure over that period was exceptional, the recent development of competition (TOGO-TAIBA - Djebel Onk and Jordan), the very low freight rates in the Atlantic which stepped up US exports, and finally the necessity for the OCP of spreading out its investments.

From September 1963 onwards, a study was made of a 6 % development but, in the light of the latest information concerning the world market for phosphates, a rate of 8-10 % was studied and finally we fixed it as follows :

1° Total production for 1964 : 10 millions tons

2°Increase of production by the OCP : 11 million tons as from 1964. (growth about 10 %)

3° For the 70-72 % Youssoufia quality a minimum production of 3,000,000 tons a year increased by the needs of the Safi Complex.

1. — A. — General production Plan

Production will continue to come from the Khouribga and Youssoufia basins.

However, since the Youssoufia reserves are partly in the watered areas and dewatering operations, which have been undertaken for the last two years will in any case be a long-term business, it is necessary to put a ceiling to the development of this Centre. Its life will however be prolonged and operation considerably improved.

2. — Distribution of production by centres for the Three Year Period

(in thousands of tons)

	1964	1965	1966	1967
KHOURIBGA ...	7.000	7.640	8.470	9.400
YOUSSOUFIA ...	3.000	3.360	3.530	3.600
TOTAL	10.000	11.000	12.000	13.000

3. — Analysis of production by product

(in thousands of tons)

31. — Product 75 %.

Place	1964	1965	1966	1967
Underground extraction				
Recette 2	2.310	2.250	2.250	2.250
Recette 6	1.620	1.560	1.500	1.500
Recette Grouni	1.329	840	100	—
TOTAL	5.259	4.650	3.850	3.750
Open extraction				
Sidi Daoui Nord	690	690	690	690
Sidi Daoui Sud	—	—	—	450
Sidi El Mâati.	—	880	900	900
Meraa El Arech	—	—	950	1.200
TOTAL	690	1.570	2.540	3.240
TOTAL 75 % ..	5.949	6.220	6.390	6.990

32. — Product 72 % HN

Place	1964	1965	1966	1967
Recette 9 (underground)	—	620	1.350	1.440

33. — Product 80/82 %

Place	1964	1965	1966	1967
Siège d'Oued-Zem.	800	800	1.000	1.000

34. — 70/72 % K2L

Place	1964	1965	1966	1967
Meraa El Arech ..	—	—	950	1.200

35. — 68 % K2S

Place	1964	1965	1966	1967
Sidi Daoui Nord ..	—	—	—	420
Sidi Daoui Sud ...	—	—	—	270
TOTAL				690

36. — 70/72 % Youssoufia

Place	1964	1965	1966	1967
Recette 2	750	1.125	1.300	1.200
Recette 3	750	750	900	900
Recette 5	—	—	200	750
Open	1.500	1.485	1.200	750
Total Youssoufia .	3.000	3.360	3.600	3.500

Overall view of expansion

Khouribga Basin

Underground production will remain more or less constant during this period in order to keep up full employment. New working methods will bring a better output.

The extra production as compared with traditional underground production will be achieved by means of two discoveries of importance, one at Maraa el Areeb (2,750,000 tons per year from 1967), the other at Sidi Daoud South (start-up in 1967 to reach 5,200,000 tons a year in 1970).

Some outcrops (Sidi el Maati) may tide us over until the larger areas begin to operate.

Treatment will be carried out by the Centres de Traitement already existing (Khouribga and Kerbour Rif-Oued Zem) and by the industrial centre of Ben Idir, at present in process of construction.

Youssoufia Basin

Temporary discoveries will be worked until 1967.

From then on all production will take place by underground landings (recettes).

New working methods are being tried out and will soon be general, provided they are successful.

The treatment plant at Youssoufia is being extended so that drying will be 9 days, 8 by fuel heating and one by Djerada anthracite.

A mechanised stock of 400,000 tons is to be provided.

Youssoufia will be able to provide, apart from the tonnage mentioned, feed for the Safi Complex as follows :

— 1965	150-200,000 tons
— 1966	200,000 tons
— 1967	500,000 tons

4. — Investment estimates

The long-term investment programme will require the following :

41. - Investments earmarked for 1964

122,867,000 DH

42. - Investments 1965

161,610,000 DH

43. - Investments for 1966

94,100,000 DH

44. - Investments for 1967

96,600,000. DH

Overall budget estimates for 1964 - 67

Year	Tech. budget	Tech. expansion	Research	Social budget	Admi.	Contingencies	TOTAL
1964	20.167	122.867	7.900	12.700	1.465	8.650	173.749
1965	49.257	161.610	7.920	13.900	1.500	22.576	256.763
1966	24.000	94.100	8 640	15.200	1.700	13.500	157.140
1967	26.000	96.600	9.360	16.500	1.800	14.090	164.350

It should be noted that these are undertakings and that payment will be spread over 3-4 years.

These figures may seem high but it should be understood that, compared with the Three Year Plan, investments have been advanced by nearly six years. This will enable the OCP to possess double the potential it had in 1963.

Summary of the investment estimates for

YOUSSOUFIA

Extraction

Investments are needed for the following work in 1965 :

— Recette 3 - mechanised quarter	1,100,000 DH
— Servicing Recette 4 by conveyor	4,750,000 DH
— Conveyor line	1,600,000 DH
— Electric equipment	450,000 DH
— Regulating stock	800,000 DH
— Equipment for Recette 5	5,200,000 DH
— Conveyor	6,500,000 DH
— Electric equipment for Recette and conveyor	2,050,000 DH

besides this development of mechanised faces as from 1965 (one a year) : 1,750,000 DH × 3.

Treatment

Work for the drying plant is concerned with the following in 1965 :

HT equipment	100,000 DH
Supplementary stock, mechanised	1,000,000 DH
Completion of fuel-heating	500,000 DH

KHOURIBGA

Extraction

Mechanisation for long faces is to take place from 1966 at the rate of one face per year (1,750,000 DH).

General services

The general electrical substructure needs investment as follows :

— 2,000,000 DH in 1965

— and 6,000,000 DH in 1966.

BENI IDIR

Extraction

Investments represent 31,110,000 DH in 1965 and are concerned with the R7 discovery at Meraa el Amel, in particular with :

- equipment of the discovery and transport of layer ;
- clearing, sceening and stocking layer 2 ;
- supplementary equipment for discovery of layer 3 ;
- supplementary substructure, civil engineering.

Treatment

The Beni Idir complex is going ahead at the following rate :
Clearing, screening etc. by 1965

Drying ovens (1 in 1965, 3 in 1966, 1 in 1967)

Sluicing unit in 1965/66

Stocking and handling of layer 2 in 1965/66

Doubling train loading installation

Treatment of Sidi Daoud S. products distributed as follows:

Stocks and handling for 5 MT over 3 years from 1968

(washing layer 3 over two years from 1967).

⁂

RECAPITULATION OF MINING SECTOR - PUBLIC AND SEMI-PUBLIC INVESTMENTS

(in thousands of DH)

NATURE	1965	1966	1967	TOTAL
I. — *DIRECT STATE INVESTMENTS*				
— Mines and geology (1) ..	3.820	2.320	3.500	9.640
— BRPM appropriation	12.000	12.000	11.000	35.000
II. — *SEMI-PUBLIC SECTOR*				
— B.R.P.M.				
a) Funds in association with private sector ..	35.840	33.940	32.500	102.280
b) Borrowed funds	—	9.000	6.000	15.000
— O.C.P.	161.610	94.100	96.000	352.310

---

(1) Note that the expenditure on training comes under Chapter III.

III. – Private sector

I. — POWER PRODUCTION

Coal - Petroleum products

A. — Production, export and import of power resources from 1959-1963 (incl.)

I. — Anthracite

The only coal-field in Morocco is at Djerada and is worked by the "Charbonnages Nord-Africains" (CNA). It can produce 600,000 to 800,000 tons of anthracite a year. The deposit comprises six layers of which 4 are worked. Working is relatively difficult owing to the thin surface of the layers between 40 and 60 cm. At the same time the friability of the anthracite in some parts of the deposit brings a high proportion of finished products. The deposit is easily accessible, the security conditions are good and the anthracite itself of high quality.

The products issuing from a modern washing-station have the following characteristics:

Carbon content 65-88%

Volatile matter 6.5-5.4%

Cinders 30 and 6%

Calorific power 5100-7180.

Apart from these favourable elements there has been a slackening of production, i.e 510,000 tons in 1958 and 404,000 tons in 1963.

This is connected with the slackening of sales which dropped from 450,000 tons in 1958 to 387,000 tons in 1963, owing to small withdrawals by thermic stations and the loss of most of our exports to the Oran region.

II. — SOFT COAL AND COKE

For several years our imports of coke have been about 9-10,000 tons per year. During recent years about 100,000 tons of soft coal were imported.

III. — PETROLEUM PRODUCTS

The production of crude oil rose from 74,000 tons in 1958 to 150,000 tons in 1964 but there was a set-back in 1964 when production was only 125,000 tons. Imports, which were 78,000 tons in 1958, reached 900,000 tons in 1964.

As regards refining, the Mohammedia refinery has been added to that at Sidi Kacem and brought capacity up to 1,700,000 tons in January 1962.

Refining in going steadily ahead. It amounted to 882,000 tons in 1962 and 1,075,000 in 1964.

B. — **Fuel and power consumption**

The table below whows, for 1960-63, the entire consumption and the estimate for 1964:

	1960	1961	1962	1963	1964
Electricity (GWh) (1)	896	929	966	1.161	1.250
Anthracite (1000 tons)	203	219	203	213	240
Coke	9	8	11	10	10
Essences	248	215	244	250	259
Petrol	54	54	55	59	64
Gas oil	200	235	238	256	288
Fuel oil	236	246	260	280	354
Butane	18,7	19,3	20,3	24,8	29
Propane	2,1	2,3	2,4	2,6	2,7

C. — **Means of production**

I. — ANTHRACITE

The capacity of production at Djerada was estimated at 600-800.000 tons per year.

As a result of slumps the coal-field only once reached its lowest tonnage - i.e 565,000 tons in 1953. Its equipment enables it to rise without difficulty to 600-800,000 tons, provided that this rise is progressive, for example about 50,000 tons. Production of 600,000 tons includes the following types of production:

---

(1) Total sales.

Fines and second fines	230,000 tons
Washed fines and grains	220,000 tons
10/20 grains and calibrated	170,000 tons

II. — PETROLEUM PRODUCTS

Taking into account the present production rate of the Gharb and Sidi Kacem, which can reasonably produce 100,000 tons a year, we may estimate that production of crude oil will remain at 120,000 tons per year during the Plan period, unless further discoveries are made.

b) **Refining capacity**

This is at present 1,700,000 tons of crude and it easily exceeds the country's present needs.

c) **Production capacity of refined products**

By working the refineries at full capacity it is possible to produce about 1,600,000 tons of refined products.

D. — **OUTLOOK FOR CONSUMPTION**

The country's requirements for anthracite, imported soft coal and fuel oil are conditioned by the demand for electric power. Therefore we should state here the outlook for consumption of power and estimates for hydro-electric and thermo-electric production.

I. — **Electricity**

Stated in terms of gross requirements estimated consumption per year is as follows:

1965	1,338,000 KWH
1966	1,418,000 KWH
1967	1,582,000 KWH.

II. — Anthracite - Fuel Oil - Soft coal - Coke

Since these five types of fuel are complementary or competitive, we must study their evolution.

It will be seen that anthracite and natural gas may be the basis of production of electricity in the thermic stations. This could also be the case with fuel oil but this would only be adopted if there were an important discovery of crude oil or a shortage of anthracite.

The main consuming industries and installations are as follows:
— The two thermic stations at Casablanca and Oujda, the five cement-factories, the mining industry, phosphate drying, agglomeration of manganese, desulphurization of iron ore, the lead foundry and other industries such as paper and cardboard, cellulose in the Rharb, the Beth sugar factory etc.

The following are the estimates in thousands of tons:

	1965	1966	1967
O.N.E.			
Hydro-electric	1.077	1.137	1.137
Electricity consumption	1.338	1.418	1.582
Difference - Thermo-electric production	261	281	445
Consumption of anthracite including	190	210	330
Fines	130	150	230
Washed fines	60	60	100
Consumption of fuel oil	10	10	25
CEMENT FACTORIES			
Imported soft fines	—	—	—
Anthracite	98	104	110
Fuel oil	83	88	92
MINING INDUSTRY			
Anthracite	12	12	12
2/6 - 6/10	26	21	21
Agglomerated	5	5	5
Fuel Oil	184	198	219
Coke	5	5	5
MISCELLANEOUS INDUSTRIES AND DOMESTIC			
Anthracite (6/10)	20	20	20
10/20 calibrated	38	40	43
Fuel	154	161	168
Soft coal	13	13	13
Coke	10	10	10

Since the capacity of the Djerada colfield is much higher than 600,000 tons and given the necessity to keep it going and make it pay, we should set the production figure as high as possible. As imports, especially to Algeria, have dropped and are likely to fade out, we must step up sales on the home market by all means at the Government's disposal.

It is essential that a circular letter should be sent to all Ministries, on the lines of one sent on 14.6.58, making it compulsory to use Djerada anthracite for heating and all industrial buildings under their control.

III. — PETROLEUM PRODUCTS OTHER THAN FUEL OIL

Ihe outlook for consumption of petroleum products is a follows: consumption of petrol and super-brands, after slackening during the last few years, has settled at 1961-1962 rates. A general assumption may be based on the increase in touring cars and the constant decrease of the cylinder capacity of vehicles in use. On the whole we can assume a growth of 1 % for the market in all these products. Consumption of gas-oil is linked to agricultural activity, Public Works, Transport and Commerce. Given the increased activity of these sectors and the replacement of petrol-driven vehicles by diesel, we may assume an annual growwth of about 10%. The consumption of spirit for lighting is rising rapidly and we may take it that growth will amount to 7% per year. The butane market is also increasing. We may take 12K as a reasonable figure. As for propane, the use of which is linked with various industries, canning, packing etc.) we may assume an annual growth of 9% which is what we can see at present.

Recapitulation of estimates for consumption of fuel

	1965	1966	1967
Electricity	1.338	1.418	1.582
Anthracite (1000 t.)			
Fines	240	266	352
Washed fines	106	101	141
10/20 and calibrated	38	40	43
Total	384	407	536
Soft coal	13	13	13
Coke	15	15	15
Petroleum products			
Fuel-oil	431	457	504
Gas-oil	324	356	392
Spirit for lighting	69	74	79
Petrol	259	262	264
Butane	33	37	42
Propane	3	3,3	3,5
TOTAL petroleum products (1000 t.)	1.119	1.189,3	1.284,5

E. — MEANS OF PRODUCTION TO BE UTILISED

1° Electricity

New means of production will have to be used during the Plan period (see reports by Public Works and ONE).

2° Anthracite

The coal-field is equipped to supply 600-800.000 tons per year. It can reach this figure from the present figure without new means of production.

3° Petroleum products

1) Petroleum research

The efforts made recently in this direction will be continued in all the potential areas of the country, DOUKKALA, BENI MELLAL, ESSAOUIRA, SOUS MOULOUYA and the HAUTS PLATEAUX. The BRPM together with foreign firms like PREUSSAG, PETROFINA, S.C.P etc. is completing preparatory work in the various basins and significant results can be expected before the end of the Plan.

2° Refining

The 1967 demand for super-brands, petrol, gas-oil, spirit and fuel-oil will be mainly covered by present refining potential. However other refined products will not all continue to be imported. In fact certain industries are to be set up during the Plan period, viz.

a) A national bitumen-refining industry

The demand for bitumen and its emulsions will be met from Moroccan refining towards the end of 1966 by the construction of a bitumen refinery. The project will meet all our requirements and will take 18 months. On the basis of an annual consumption of pure bitumen of 40,000 tons this achievement means a saving in currency of 2 million DH and a gain in currency of 700,000 DH owing to the export of by-products of distillation. According to the project investments vary between 9.4 and 6 million DH and thirty jobs will be created. It is intended to associate this industry with other industrial projects. There are possibilities here, such as the proposal to produce ammonia at Safi and the manufacture of refined products for the fuelling stations at Tangier.

b) Creation of a paraffin refining unit

This unit will be completed during the Plan period. It will take a year to build and represents an investment of 3 million DH. Saving in currency will amount to 2 million DH.

c) Creation of a unit for the preparation and conditioning of lubricants

A unit of this kind based on imported basic oils in being built at Casablanca and another is being planned. Although import of oils other than those locally refined is contemplated, there will still be new jobs and saving in currency.

d) Other products

The weakness of demand as regards other petroleum products prevents us for the moment from considering their production (basic oils, special petrol, white spirit etc.).

F. — INVESTMENT

1° Anthracite

The coal-field is equipped to produce 600,000 tons a year and it is not therefore necessary to make a special investment to develop this. We should note that a production of 600,000 tons means the training of 40-50 extra cutters. We have therefore to consider the maintenance of the present level of investment intended to renew equipment and for maintenance. This annual investment will be about 2.5-3 million DH per year. The railways do not need to incur any further expense for transport of anthracite.

2° Petroleum products

Investment required is as follows:

a) Research

Hydrocarbon research in Morocco is carried out by the BRPM, the Société Chérifienne des Pétroles (SCP) or by foreign firms linked to the BRPM by conventions. Estimates are as follows:

	1965	1966	1967	TOTAL	BRPM share
S.C.P.	6.500	5.000	5.000	16.500	50 %
B.R.P.M.	250	6.000	7.300	13.550	100 %
B.R.P.M. - PETROFINA	4.000	5.000	4.000	13.000	10 %
B.R.P.M. - CANDEL	5.500	3.000	—	8.500	22 %
B.R.P.M. - PREUSSAG	8.800	5.900	3.700	18.400	20 %
B.R.P.M. - AGIP	6.300	5.000	2.800	14.100	20 %
TOTAL	31.350	29.900	22.800	84.050	—

b) **Refining**

No new investment will be required during the Plan period for refining major petroleum products. As regards other products an investment of about 8 million DH has been provided for, related to the refining of bitumen, 3 million for parafiin and 1 million for preparation of lubricants.

3° Recapitulation of investments during the Three Year Plan

(in millions of dirhams)

	1965	1966	1967	TOTAL
ANTHRACITE				
Production	3,0	3,0	3,0	9,0
PETROLEUM PRODUCTS				
Research	31,35	29,9	22,8	84,05
REFINING				
Bitumen	—	8,0	—	8,0
Paraffin	3,0	—	—	3,0
Lubricants	1,0	—	—	1,0
Official laboratory	0,2	—	—	0,2
Total petroleum products .	35,55	37,9	22,8	96,25
TOTAL	38,55	40,9	25,8	105,25

II. — MINING PRODUCTION

Iron ore

The Market

Since Morocco has no industry for processing its own mineral products it must rely on the international iron and steel market.

Over the last ten years this industry has had serious difficulties due to the slowing-down of some types of production and labour unrest, especially in the USA.

At the same time competition is sharper both because of the substitution of some materials for iron and the new large-scale mines which have gone into production (e.g Labrador and Venezuela).

The outlook is nevertheless encouraging since the world iron and steel industry has reacted by modernising itself and by developing the search for new applications of steel. Moreover consumption per head has risen steadily in all countries.

The established commercial circuits show relative stability. There is, strictly speaking, no market quotation for iron ore and prices can only be based on supply and demand. Freight is also an important factor.

National production

Morocco has two important iron mines:

— Compagnies "Minas Rif" at Uixan.

— Société Minière de Setolazar at Setolazar.

These two firms operate contiguous concessions in the same deposit near Nador.

After various operations involving classification and treatment, the two workings supply types of merchant iron exported from Melilla. The rate of extraction is essentially conditioned by sales contracts.

The following are production figures:

	UIXAN							
Year	PRODUCTION				SALES			
	n° 1	grav.	n° 2	TOTAL	n° 1	grav.	n° 2	TOTAL
1961	564	175	112	851	835	117	107	1.059
1962	576	126	101	803	649	78	137	864
1963	598	107	118	823	372	101	130	603

Year	SETOLAZAR					
	Production			SALES		
	Roasted	Fines	Total	Roasted	Fines	Total
1961	148	62	210	192	63	255
1962	169	52	221	167	43	210
1963	165	27	192	166	30	196

The corresponding turnover is given below in millions of DH.

Year	MINAS RIF			SETOLAZAR		
	Sales FOB Beni Enzar (Melilla frontier)	Av. price in DH per ton	Tonnage	Sales FOT	Av. price	Tonnage
1961 ...	50,739	47,946	1.059	9,756	38,280	255
1962 ...	38,729	44,840	864	7,812	37,221	210
1963 ...	24,594	40,832	603	7,405	37,680	196

It may be observed that 1963 was an especially favourable year. 1964 ended with better results (e.g - Uixan 673,000 tons and turnover of about 43 million DH).

Production programme

The outlook is based on market tendencies and on reserves of ore

Or the basis of a world market survey it seems that, as far as Moroccan mines are concerned, the sales outlook will be maintained and will justify a production comparable to that of past years with a certain margin of security.

The reserves of the two companies are well known. Important resarch as carried out in recent years enable us to suppose that almost all reserves are certain and that they are amply sufficient to ensure production for many years to come.

During the next few years the mine will be obliged to work a relatively less rich ore. At the same time competition will increase on the world market and richer concentrations will be called for. In order to face this competition Minas Rif are making an intense effort at modernisation in the treatment of ores and are also preparing to work new ores.

Treatment studies have shown the efficacity of magnetic concentration. For the application of this method the ore must be ground fine, which requires afterwards a pelletization treatment facilitating sales of concentrated product.

Investments amount to about 15-20 million DH for magnetic concentration and 30 million for pelletization.

Taking into account the working programme for the present type of ore, the future installations should be in place by 1969-70 at the latest.

Production estimates will therefore be as follows.

Year	Gross production		Sales estimates					
			Rif				Setolazar	
	Rif	Seto-lazar	n° 1	grav.	n° 2	Total	Roasted	Small
1965	810	360	465	115	100	680	205	0
1966	830	360	480	120	100	700	175	0
1967	830	360	470	120	100	690	175	0

It may be estimated that for this period price will remain steady around :

FOB Melilla: N° 1

"gravilla"	$ 9.50/t.
N° 2 Uixan	$ 7.50
Roasted	$ 6.25
Setolazar	$ 7.30.

Investment programme

a) Minas Rif

As an indication investments will be:

Year	Research	Working	Treatment	Total
1961	1.912	502	993	3.407
1962	2.440	1.067	224	3.731
1963	1.733	2.192	322	4.247

Other items

Year	Social charges		Machines and equipment	Maintenance	Concessions Lands	Total
	Training	Housing				
1961	—	662	116	181	48	1.007
1962	1.408	1.212	21	67	11	2.719
1963	444	500	50	—	—	994

As regards investment estimates the progress of research work justifies a reduction under this heading and the bulk of expenditure will be devoted to preparatory work and exploitation.

Year	Mining work		Exploitation	Total
	Uixan	Axara		
1965	1.225	115	400	1.740
1966	350	200	350	900
1967	—	200	250	450

Other investments:

Year	Training	Housing	Miscellaneous	Total
1965	350	550	1.000	1.900
1966	—	550	750	1.300
1967	—	—	500	500

Method of financing: self-financing.

b) **Setolazar**

Investments for previous years are:

Year	Research	Exploitation	Treatment	Total
1961	607	775	7	1.389
1962	735	517	—	1.252
1963	167	432	—	599

The company's financial situation, due to the slump in certain ores, does not enable it to contemplate investment with any certainty. If the market permits the following figures may be quoted:

Year	Research	Exploitation	Total
1965	50	375	425
1966	50	375	425
1967	50	425	475

Manganese ore

The Market

All Morocan ore is for export.

The world market has shown a slight rise in consumption while the production capacity will tend to rise sharply owing to the existence of new producers with huge deposits and high content (Brazil, Gabon).

The market therefore became highly competitive and prices dropped until early 1964.

In 1964 prices recovered and this tendency will no doubt continue over the three-year period but the rise will be slight.

National production

Since the closing of the mine at Tiouine production has been distributed over three principal mines — Imini, Bou Arfa and Tiharatine, as well as a number of primitive workings some of which are organised on a co-operative basis.

Production for the last few years in thousands of tons of merchant iron:

Year	Imini	Bou-Arfa	Tiharatine
1961	342	78,9	25
1962	284	75,9	26
1963	177	75,0	22

Sales prices FOB in DH per ton were as follows in 1963 and 1964 (Oct.).

Year	Imini		Bou-Arfa	Tiharatine
	Sinter	Metall.		
1963	149	108	90	194
1964	156	110	59	174

The main problem for the big mines is the question of reserves. These have evolved as follows (in thousands of tons)

Year	Tiouine	Imini	Bou-Arfa	Tiharatine	Total
1960	165	3.637	423	60	4.285
1961	100	3.314	419	98	3.931
1962	40	3.020	420	50	3.530
1963	—	2.677	400	42	3.119

The continuous dwindling of reserves (which has already caused the mine at Tiouine to close) will go on during the Plan period. It will also mean the closing of Tiharatine. Researches at Imini have not produced any useful results, whereas at Bou Arfa the outlook for research is good.

Production programme

In view of these considerations the programme has been laid down as follows (in thousands of tons of merchant iron):

Year	Imini	Bou-Arfa	Tiharatine
1965	180	75	10
1966	180	75	—
1967	180	75	—

Evolution of reserves :

Year	Imini	Bou-Arfa	Tiharatine	Total
1965	2.320	300	—	2.620
1966	2.140	250	—	2.390
1967	1.960	200	—	2.160

Investment programme

For the period 1960-63 the average annual accumulated investments of the four mines (including Tiouine before closing) were 6,838,900 DH of which 4,611,150 DH were for research and exploitation. Most of these investments were made by the Imini and Bou Arfa mines.

Estimates for the Three Year Plan have been given by these two mines only: 3,135,000 DH of which 2,318,000 will be for research and exploitation.

A special effort will be made to carry out research and improve the ores as will be seen from the following table (in thousands of DH).

Year	Research	Exploit.	Treatment		Social		Machines and material	Total
			Material	Civil	Training	Housing		
1965	1.527	780	125	30	270	250	110	3.092
1966	1.600	780	125	30	265	250	110	3.160
1967	1.600	780	125	30	265	250	110	3.160

Financing is by self-financing on the part of the two companies.

LEAD AND ZINC ORES

The Market

The whole of the zinc ore produced in Morocco is exported. Part of the lead ore is processed locally at Oued el Heimer and the lead produced is exported.

World production and consumption are rising steadily since lead and zinc are in regular use, but the market may be subject to periodic crises causing the mines to pass through phases of precarious profitability. Under the aegis of the UN an international commission meets from time to time to study and propose measures for remedying the situation.

Prices are naturally affected by these crises and are subject to wide variations:

	1961		1962		1963		1964	
	Pb	Zn	Pb	Zn	Pb	Zn	Pb	Zn
Prices France frs/mt.	941,25	1.151,35	845,83	1.042,92	920,03	1181,04	1180,1	1469,50
London (£ per long ton)	64,21	77,75	56,40	67,85	63,35	76,53	83,90	106,34

Information on previous years makes us cautious about estimates. The very high level of prices at present puts the mines in an excellent situation, but prices are unlikely to settle at such a high figure.

The International Commission will coninue to meet and we may suppose that a balance will be maintained between production and consumption during the three-year period.

National production

Extraction of lead and zinc can be divided into two sectors: the first is that of the big mines (including CADET a sales co-operative) and accounts for 80% of production. The second is that of the small mines which are worked in rudimentary fashion.

Principal producers in 1963 with totals and turnover:

		Production		Exportations		Destination
		Zn	Pb	Zn	Pb	
Zellidja		23.000	19.400	21.200		Pb OEH foundry Zn France
Aouli Mibladen		—	35.000	—	35.400	France : 32.500 T
Penarroya - Maroc		—	5.000	—	2.110	France 32,500 t.
Touissit Cram ...		20.460	18.800	19.400	19.100	France: 17.500 T Zn France: 18.000 T Pb
S.M.A.M.		—	1.500	—	1.500	France
Aouam		—	12.600	—	12.800	France : 11.700 T Pb
Sidi Bou Othman (C.R.A.M.)		2.800	—	3.310	—	France : 3.310 T
C.A.D.E.T.		—	4.700	—	4.500	France : 1.020 T Italy : 2.450 T
Total	Tonnage	46.260	97.000	43.910	75.410	
	Value FOB in millions of DH			16,70	30,10	

Apart from the workings controlled by the big mines there are various small enterprises.

The production figures for the Oued el Heimer lead foundry were as follows in 1963:

Production	18,761 tons of fine lead
	24,000 kg. of silver
Total sales	18,536 tons of lead.

These mines have variable reserves. Whereas some mines such as Toussit, Aouam, Aouli etc. have very large reserves, others are faced with exhaustion of deposits (Zellidja, Sidi Bou Othman etc.). Reserve tonnage is also affected by prices and often raises a technical problem (e.g the exploitation of the oxidised ore at Zellidja).

An effort will therefore be made to carry out research (extension of existing deposits or a search for new ones).

Production programme

We must make a distinction between working mines and projects.

Exploitation	1965	1966	1967	Notes
Zellidja	Pb : 13.000 Zn : 25.000	Pb : 13.000 Zn : 25.000	Pb : 13.000 Zn : 25.000	Oxides recommenced on 1.9-64
Aouli - Mibladen .	Pb : 42.000	Pb : 42.000	Pb : 42.000	
Touissit	Pb : 18.000 Zn : 24.000	Pb : 18.000 Zn : 24.000	Pb : 18.000 Zn : 24.000	
Djebel Aouam ..	Pb : 15.000	Pb : 15.000	Pb : 15.000	
Penarroya Maroc ...	Pb : 5.000	Pb : 5.000	Pb : 5.000	Rudimentary working from 1.1.62. Estimates between 5 and 10 thousand tons of lead
S.M.A.M. ..	Pb : 1.300	Pb : 1.300	Pb : 1.300	
Sidi Bou Othman ..	Zn : 2.800	Zn : 2.800	Zn : 2.800	
C.A.D.E.T. .	Pb : 6.000	Pb : 6.000	Pb : 6.000	Content falling: 1964 : 65 % 1965 : 62 % 1966 : 60 %
Total	Pb : 100.300 Zn : 51.800	Pb : 100.300 Zn : 51.800	Pb : 100.300 Zn : 51.800	As there are no estimates for ZnO-Zellidja production has been underestimated.

As regards the small mines, it is impossible to make long-term estimates, since the mines are highly susceptible to price fluctuation which sometimes either barely marginal or highly profitable — hence wide variations in production tonnage.

b) **Projected mines**

A certain number of deposits are at present being studied, from geological surveys to final plans for operation:

— Moulouya lead: survey nearly completed
— Bou Madine: Geological surveys, research etc. going on
— Bou Arhous: Research and feasibility study
— Tifelouest: Feasibility study
Limestone backbone of the Riff: Feasibility study
Afra Gundafa and others (Beni Maden, Foum Jerrar etc.): studies are being made.

Generally it is the BRPM which carries out most of these studies.

At the same time it should be noted that this project for zinc metallurgy might enable us to use local ores to better advantage.

Investment programme

a) **Working mines**

The table below gives the picture (in thousands of DH):

Exploitation	1961 1962 1963	1964	1965	1966	1967	Total - Plan
Zellidja	6.475	850	550	300	300	1.150
Aouli - Mibladen ...	12.125	2.850	—	—	—	—
Touissit	12.275	2.400	2.250	2.250	2.250	6.750
Djebel Aouam.	3.900	600	610	610	600	1.820
Penarroya ...	708	—	—	—	—	—
S.M.A.M.	603	150	150	150	150	450
Sidi Bou Othman	814	80	80	80	80	240
C.A.D.E.T. ...	640	200	200	200	200	600
Total	37.540	7.130	3.840	3.590	3.580	11.010

This total is distributed as follows:

Research	Exploitations		Workshops		Social	Machinery Maint. enance Buildings	Total
	Equip.	Civil	Equip.	Civil			
2.490	1.920	300	810	300	690	4.500	11.010

b) **Projects**

31.6 million DH are estimated for all deposits being studied.

Method of financing

As regards existing workings financing will come from private firms, either by direct contribution or by borrowing:

a) **Working mines**

Year	Public contribution	PRIVATE CONTRIBUTION		
		Self-financing	Local loans	External contribution
1965	Nil	1.520	Nil	70
1966	Nil	1.540	Nil	70
1967	Nil	1.550	Nil	70

b) **Projects**

In the case of projects and research likely to uncover deposits we must count on State investment unless partners can be interested in the business. For the moment, out of the total which we have estimated at 31.6 million DH, we may assume the following distribution:

BRPM	**19.3 million DH**
Local borrowing	**4.5 »**
External »	**7.8 »**

COBALT

The Market

Cobalt is relatively stable. Morocco supplies about 10% of world requirements. This stability will no doubt last for the next three years.

Local production

Bou Azzer is the only deposit worked.

	1961	1962	1963	1964
Production in metric tons (concentrated).	12.900	13.364	13.707	13.000
Exports in tons ..	11.513	11.368	16.712	14.700
FOB price in DH/ton	760	670,23	750	750
FOB value of exports in DH	8.749.880	7.619.174	12.534.000	11.025.000

1964 figures are based on the first eight months. All production is sold in France.

Production programme

	1965	1966	1967
Production (concentrated)	13.000	13.000	13.000
Cobalt content	11 - 12	11 - 12	11 - 12

Reserves are sufficient to permit this rate of production during the three year period and meanwhile a considerable research programme is to ensure production after the Plan.

INVESTMENT PROGRAMME (see table - in thousands of DH)

Pyrrhotine (sulphur ore)

Introduction: Since 1960 the BRPM has been preparing to exploit the important pyrrhotine deposit at Kettara, estimated at 12,000,000 tons of pyrrhotine with 30% sulphur content. This deposit will feed the Safi Complex at the rate of 500,000 from 1967 onwards.

Present market and outlook

The selling price of 40 DH per ton (transport included) estimated on 31.7.64 and the creation of the Safi Complex give the following requirements:

Estimate	Production in tons	Local sales in tons	Exports
1964			
1965	94.000		
1966	280.000	Safi	—
1967	480.000	complex	—

Local production

The Kettara mine has been open for a long time but the new outlet provided by the Safi Complex has caused important extensions both in the field of research (reserves) and equipment necessary to reach the rate of production intended.

A the end of 1964 18.80 millions DH were invested, almost entirely by the BRPM, with the following results:

— Research: exploration of 12 million tons of mineral sufficient for the Safi complex for 20 years.

— Exploitation (preparatory): sinking and equipment of shaft II, initial sinking of shaft I, substructure and civil engineering.

Production programme

After two years initial working from 1965 to 1966 the nominal rate will be 480,000 tons a year. This development will bring a lowering of cost price per commercial ton.

	1965	1966	1967
Commercial production in metric tons	94.000	280.000	480.000

Investment programme

Distribution of investments (in millions of DH)

Year	Preparatory research	Exploitation		Installation Treatment	Housing	TOTAL
		Equip.	Civil			
1960 1963	7,30	2,70	0,30	—	0,80	11,10
1964	3,85	2,20	0,50	0,50	0,50	7,55
1965	3,15	1,48	2,20	1,58	0,70	9,11
1966	1,00	1,50	0,20	0,67	0,80	4,17
1967	1,00	0,88	—	0,15	0,80	2,83
Total plan	5,15	3,86	2,40	2,40	2,30	16,11
1968 and after	4,50	2,83	—	0,45	—	7,78
Grand total	20,80	11,59	3,20	3,35	3,60	42,54

As regards equipment and civil work it is estimated that 40% of orders will be given to local contractors.

Financing

The BRPM, which has hitherto borne the whole technical and financial effort at Kettara, is shortly to found the SEPYK company (Société d'Exploitation des Pyrrhotines de Kettara) with the help of the OCP and the BEPI, each subscribing 21.25% of the 20 million DH capital and the BRPM 52.5%.

The OCP's agreement is required and BEPI has already agreed.

The constitution of this company may solve the financial problem.

Copper ore

The Market

Morocco has no copper metallurgy and the whole of the ore is exported.

The copper market consists essential of the metal and only small quantities of rich concentrate are sold in Europe.

As long as the local market cannot reach a capacity justifying a metallurgical industry (about 10,000 t/yr.) the mines will be interested in producing high-content concentrates.

For some years prices have been quite high and remarkably steady:

1963:

New York	28.41 cts. per lb.
London	£235 per long ton
Paris	3210 F per metric ton.

Local production

Production is spread over a certain number of small workings, of which the most important are: Bou Skour, Djebel Klakh, Azegour and Ounein.

All together these four mines produced, in 1963: 1500 tons of metal in 1960, 1735 in 1961, 1531 in 1962, 1700 in 1963. The workings are therefore rudimentary and of small importance.

Production estimates

As regards working mines the two most important, Klakh and Bou Skour, have given estimates as follows (tons of concentrate):

Year	Klakh	Bou Skour
1965	1.500	4.000
1966	1.500	4.000
1967	1.500	4.000

At the same time the Safi Complex will produce in 1965 (for 200,000 tons of TSP) about 162,000 tons of pyrrhotine cinders. The pyrites cinders from Kettara, by-products of the superphosphate plant at Casablanca and treated in Germany, would give 1320 tons of copper metal per year. But this copper has not been accounted for in Moroccan production.

The copper content will represent in 1965:

— Copper metal from estimated concentrates: 2500 tons

— Pyrrhotine cinders at 10%

s/ 162,000 tons, or 1,620 tons.

Total: 4120 tons.

If we add 1320 tons extracted from the pyrites cinders from Kettara and the 1000 tons at Talaat N'Oumane, we should have 6440 tons of copper in 1965.

Possible development of deposits hitherto unworked

There are many sites, some of them known in ancient times, but they are of slight importance, scattered and distant from the large towns and ports. In fact they are mostly in the Anti-Atlas (Talaat N'Oumane, Tazalakht, Agoujgoul) and the Sarho (Bou Skour, Tiouit, Tizi Moudou). Even those in the western High Atlas (Azegour) or in eastern Morocco (Jebel Klakh) seem to belong to the metallogenic province of southern Morocco. Whereas these Filonian deposits are mainly of hydrothermal origin, others of stratiform type in the western High Atlas seem to have a different origin, probably syngenetic.

Recent prospection by Wesfield Minerals Ltd. in the Sarho and Bou-Azzer and now continued by Sarho Mines have revealed promising indications and we must await the results in order to quote figures as to reserves and content.

The mineralised layers of copper in the Trais of the High Atlas, although low in content, deserve study. On the one hand we must remember that they are not far away from Agadir-Marrakech and at the same time they represent, poor as they are, substantial tonnages. Expeoitation of these mines, even if marginal, could be complementary to the rest of Moroccan production and could reach 10.000 of copper metal per year, necessary for the installation of a small foundry.

Investment programme

Deposits being worked are not widely extended and the companies are concentrating on research in order to assure themselves of reserves necessary for operation, as will be seen from the following table.

Djebel Klakh

Year	Mining research	Exploitation		Enrichment		social	Renewal and maintenance
		Equip.	Civil	Equip.	Civil		
1960	81.200	—	—	9.252	6.099	91.994	2.350
1961	117.215	—	—	34.574	20.444	31.980	216
1962	82.600	136.857	22.686	26.599	10.413	22.391	2.000
1963	75.450	20.000	10.000	20.000	10.000	20.000	2.000
1964	73.450	20.000	10.000	20.000	10.000	20.000	2.000
1965	94.950	20.000	10.000	20.000	10.000	20.000	2.000
1966	70.000	20.000	10.000	20.000	10.000	20.000	2.000
1967	70.000	20.000	10.000	20.000	10.000	20.000	2.000

Bou Skour

Year	Research	Equipment	Training	Rolling-stock
1965	200.000	400.000	15.000	50.000
1966	—	100.000	—	—
1967	—	100.000	—	—

Antimony

Antimony mining in Morocco, after a wide-scale research programme from 1949 to 1952, ceased all activity in 1956. Only the mine at Fahama-south survived until 1962, mainly owing to its proximity to a port.

This was mainly due to external influences. Antimony is a **recoverable** metal and world consumption is still very slight, about 2 % of the consumption of lead. Apart from limited outlets there is the question of the quality of the ore, for the manufacture of products derived from antimony requires ores free of lead, but

Moroccan ores often contain so much lead that they are unsaleable during low-priced periods.

Nevertheless, after a long period of very low prices, rates have risen, slightly in the beginning and then to a considerable extent. Thus in January 1964 antimony metal was quoted at the average price of £ 262 the long ton and it has now reached £ 391. This spectacular recovery has enabled several plants to renew research and operations. Mainly involved are the deposits at Timerdoudine, worked by hte Société Marocaine des Mines et des Produits Chimiques, Société Nouvelle Union des Métaux Maroc, Tarmilat and M'guedh, worked by the SOMITIR company.

Alongside this re-opening of sites previously at a standstill work at the mines of Beni-Mezala, Tourtit and Massey-Amane has regained its normal rate Research is being actively pursued and new tonnages have been reconnoitred.

Nevertheless, given the essentially variable nature of the market in the past, we cannot count for certain on the stability of these high prices or make any definite forecasts for the future.

If the market remains favourable during the three-year period, we may suppose that production in the principal mines will show the following figures for each year of the Plan :

	Tonnage	Content	Value FOB in DH
Compagnie Espagnole Beni-Mezala	750	43 %	450.000
O.G.I.M.	600	57 %	600.000
S.M.M.P.C.	400	46 %	500.000
S.N.U.M.M.	600	55 %	780.000

Possible reserves are abundant. But the instability of production still prevents large-scale working and permanent research will be needed to ensure the product estimated by the companies.

Investment programme

The total of investments estimated for the different mines, provided that production can continue at its present rate, is given below (in thousands of dirhams) :

Year	Research	Exploitation	Treatment	Social	Total
1965	260	430	60	5	755
1966	260	400	70	5	735
1967	260	380	60	5	705
Total plan	780	1.210	190	15	2.195

Financing will be partly self-financed and partly by loans.

TIN

Morocco only produces a small quantity of cassiterite coming from a single deposit in the Oulmes area. The ore is processed on the spot into tin metal and used by the local market. Past and estimated production of cassiterite is here given in tons :

1960	1961	1962	1963	1964	1965	1966	1967
15	19	16	13	28	20	20	20

International prices have risen constantly for the last few years. The sales price of tin metal on the local market was 12,300 DH/t. in 1963.

Exploitation and reserves

The mine at El Karit has considerable reserves (5000 tons of cassiterite) but the ore has a very weak content of 400 gr./m3, very close to the margin.

The main problem is therefore the cost price. The only hape for this industry is improvement of the ore on the spot with a rudimentary vertical fusion furnace and sale of the metal on the local market.

Investments

No programme is contemplated for this marginal mine which employs about fifty workmen.

BARYTINE

The Market

The international market has developed recently with the use of barytine in drill-hole sludge but resources have been systematically prospected and the market remains very competitive.

Local consumption is infinitesimable.

FOB sales prices dropped in 1963 (49 DH per ton) and rose again in 1964 to 52 DH.

ocal production

Barytine is produced by one company, Société Marocaine des Mines et Produits Chimiques, which works two deposits, Djebel Irhoud and Oued Tessaout.

The following table gives production and sales in thousands of tons :

YEAR	PRODUCTION 80 % SO^4 Ba	Sales	
		Export	Local
1960	84,3	82,0	1,0
1961	82,1	82,1	1,0
1962	89,8	87,2	1,5
1963	94,5	98,5	1,5

The mine is worked on a good profit-making basis but the barytine extracted from Oued Tessaout has to bear heavy transport charges.

The probable reserves of the two deposits are abundant as the following table shows :

RESERVES

Company	Year	Visible	Content	Probable	Content	Possible	Content
SMMPC ..	1960	70	80 %	360	60 %	920	60 %
	1961	70	—	360	—	920	—
	1962	200	—	400	—	1.000	—
	1963	200	—	500	—	1.000	—
	1964	300	—	500	—	1.000	—

Production programme

Production is increasing, thus :

Company	Max. capacity	Estimated tonnage	Value of production FOB (in DH constant 1962)
S.M.M.P.C.	120.000 to 150.000	120.000	5.640.000 DH

Reserves should remain constant thanks to a permanent research programme.

Evolution of reserves, visible and probable, in thousands of tons :

Company	Year	Visible	Content	Probable	Content	Possible	Content
SMMPC ..	1964	300	80 %	500	60 %	1.000	60 %
	1965	300	—	500	—	700	—
	1966	300	—	500	—	600	—
	1967	300	—	500	—	500	—

Investment programme : evolution of investments estimated in thousands of DH (Irhoud and Tessaout).

Year	Mining research	Exploitation		Enrichment (tests etc.)		Social		Machinery and rolling-stock	Renewal Maintenance
		Equip.	Civil	Equip.	Civil	Training	Housing		
1963 ..	300	100	60	60	100	20	10	30	40
1964 ..	300	300	100	100	150	10	10	30	40
1965 ..	350	300	100	150	200	10	10	20	40
1966 ..	350	200	70	100	150	10	10	20	40
1967 ..	350	200	70	50	60	15	15	30	40
Total Plan .	1.050	700	240	300	410	35	35	70	120

To summarise :

1965 :	1180 thousand DH
1966 :	950 — -
1967 :	830 — -
Total Plan	2960 thousand DH

All these investments represent supplies or loans of local origin.

POTASH

At present there is no potash industry, but the results of research undertaken for more than ten years, and which are still going on, hold out hopes of establishing national production shortly.

The market

a) The present market

During 1961-62 world production was as follows :

— In chloride at more than 45 % K2O and sulphate (Eastern bloc countries not included)	6.9 million tons
— All grades (same observation)	9.16 million tons

At that time Western Europe was the greatest world producer but, with the huge deposits discovered in Canada, North America now holds first place.

This is a major event which will condition the market for some years to come.

World consumption is increasing but that of Africa is still small compared with the other continents. For example Algeria and Morocco together only consume 20-25,000 tons a year.

At present Morocco only consumes about 15,000 tons of potassium fertilizer (800 tons K2O).

International prices are controlled by the main producers (Germany, France, USA). In the first quarter of 1963 FOB price W. German port for chloride basis 60 % K2O was between 250 and 300 DH per ton.

Internal prices in importing countries are a good deal higher owing to freight and marketing costs.

b) **Market outlook**

Consumption of potassium fertilizers should increase regularly according to the following estimates (1000 tons K2O).

	1965 - 1966	1970 - 1971
W. Europe	4,22	4,79
N. America	3,68	3,21
Other western countries	0,85	2,49
Total western countries	8,75	10,49
Eastern bloc	2,39	3,15
World total	11,14	13,64

As regards evolution of prices these are unlikely to rise during the next few years. On the contrary, the discoveries in Canada and the corresponding increase in production should largely cancel this trend.

Outlook for production and work undertaken

No exploitation is taking place as yet but research has revealed a deposit at Khemisset and present activities (soundings and surveys) are intended to study feasibility for this deposit.

In this basin near Khemisset research has shown the existence of a carnalitic layer 3-5 metres thick over more than 10 hm. in a NE-SW direction with K2O content varying around 10 %. Recently a sylvinitic layer was discovered west of Khemisset.

Possible reserves of this basin are considerable and are being studied.

The economic authorities have decided to intensify the necessary surveys to see whether Morocco may hope to develop a potash industry in the near future.

To this end a survey commission was constituted in April 1963.

During the following months it is intended to continue and intensify the work on the same lines.

As soon as possible it will be necessary to beging sinking a shaft which will terminate the research stage and prepare for exploitation. We must also envisage considerable expenditure for putting treatment methods on an industrial basis and this will involve the construction of a pilot washery.

Investment programme

After a feasibility study carried out in July 1964 we can assume an annual production of at least 150,000 tons of K_2O per year.

The following expenditure will be required for completion of studies and preparation for working :

Year	Research	Prep. studies		Equip.	Total	FINANCING		
						BRPM Funds	private Funds	Loans
1965	3	0,5	—	—	3,5	1,25	2,25	—
1966	3	0,5	2	1	6,5	2,75	2,75	1
1967	3	0,5	3,5	1	8	3,50	3,50	1
TOTAL	9	1,5	5,5	2	18,0	7,50	8,50	2

Essential characteristics

Volume of sales 33 million DH (ex-works)

Value FOB of exports : 34 million DH

Personnel : 1000 (850 workmen)

Wages and salaries 10 million DH (with social charges)

Chief articles of consumption : Electric power : 45 million KWH.

Net profitability assuming a loan of 60 % of investments is about 10 % and should allow for private investment.

Financing methods

If we assume that the State will be responsible for research expenses, it seems that we must seek a partner (e. g the Mines Domaniales des Potasses d'Alsace, which holds the Khemisset permit, together with the BRPM, in the Société des Potasses des Zemmours).

At the same time the feasibility study shows that it would be possible to arrange to a great extent (about 50 % of investments) some other form of financing with external borrowing.

One of the aims of the study commission in 1965 will be precisely this — a detailed study of financing.

FULLER's EARTH

The market

Moroccan production, past or estimated, is exported to the extent of two-thirds and the rest is sold on the local market on the basis of mining and petroleum soundings.

Local production

1960	1961	1962	1963	1964
37.672	38.603	32.639	37.367	21.000

Sales prices vary between 46 and 52 DH as at 30.6.63.

Production stems exclusively from the Nador region, mainly from the Providentia deposit (reserves unknown - open) at Edhum (200,000 tons visible), Sfaya (150,000 tons visible - underground) and Trebia (200,000 tons possible - open).

The other deposits, very numerous in the area, will be kept as a reserve. There is therefore no reserve problem, the whole of visible reserves being about 800,000 tons and each working having an average life of ten years.

Investment programme

Estimated investments have been fixed at 35,000 DH per year entirely effected by the private sector and devoted solely to mining research.

FLUORINE

The market

World consumption of fluorine has increased considerably for the last few years and, in view of the gradual exhaustion of known deposits ,even with low-content mineral, research has been active.

Moroccan consumption is at present 200 tons a year for glass-making and the installation of an iron and steel plant would mean a consumption of 800 tons. Therefore present production aims mainly at export. The price FOB Kenitra in 1963 was $ 11.75.

Local production

Morocco has two deposits which are economically interesting, that of El Hammam (central Morocco), which began to be developed in 1961 and has developed steadily since then, and Tirremi, where operations were resumed in 1963 on a small scale and with developing research.

Reserves, following considerable research on El Hammam carried out by the Société Samine with the BRPM, rose from 50,000 tons certain, plus probable reserves, in 1960 to 500,000 tons in 1964. Work will go on during the three-year period and it is probable that reserves will rise steadily between 1965 and 1967.

Soundings intended to take place in 1965 at Tirremi will perhaps enable us to discover new reserves on this little known deposit. Future research and exploitation depend on the results of the initial surveys.

Production programme

An important problem to be solved for the working of the El Hammam deposit is that of the treatment of the ore, which contains a great deal of SIO2, CO3Ca as well as pyrrhotine and pyrites. Present production of metallurgical ore is obtained by summary washing. A floatation unit must be provided for as soon as known reserves are sufficient to amortize it.

As for Tirremi the problem is one of **seeking** reserves.

In view of these difficulties estimated production is 6500 tons for each year of the Plan.

Investment programme

Total investment for El Hammam is 6 million DH (1 million : BRPM - 2 million private - 3 million borrowing).

Investment provided for in the case of Tirremi in 1965 is 400,000 DH, of which 200,000 will be for the BRPM and 200,000 DH for the private sector. Investment for 1966 and 1967 will depend on the result of research in 1965.

Thus :

	Total investment	B.R.P.M.	Private sector	Borrowing
1965	1,9	0,70	1,20	
1966	3,5	0,35	0,65	2,5
1967	1	0,15	0,35	0,5
Totaux	6,4	1,20	2,20	3,0

SALT

The market

The salt market is essentially an internal market, either for food purposes or for industry.

a) **Uses.**

	1960	1961	1962	1963
Food	9.074	10.357	14.943	14.505
Industry	809	779	2.553	4.914
Canning	5.939	8.655	7.098	10.294
Souks	1.777	651	965	1.043
Miscellaneous	460	274	279	
TOTAL	18.059	20.716	25.838	30.756

b) Locality.

	1960	1961	1962	1963
CASABLANCA and region	7.661	9.464	13.606	15.352
SAFI	6.080	8.684	7.500	10.616
EL JADIDA	157	160	160	349
KENITRA	106	78	400	538
RABAT	104	59	365	659
SIDI BENNOUR .	246	231	395	242
Others	3.705	2.040	3.412	3.000
TOTAL	18.059	20.716	25.838	30.756

Note the constant progression :

— of domestic consumption — (nearly 45 % increase from 1961 to 1962) due to the fact that the population consumes more and more white salt, treated, instead of the rock-salt sold in blocks.

— of industrial consumption, which rose from 780 tons in 1961 to 2550 in 1962 and 1665 tons for the first six months of 1963 alone.

In view of the rising population and the growth of industrial demand we may estimate Morocco's requirements at an average figure of 84,300 tons distributed as follows :

— by sector of utilisation

Food	41,000 tons
Industry	17,400 »
Canning	22,900 »
Miscellaneous	3 000 »
TOTAL	84,000 tons

— by regions

Casablanca and region	17,500 tons
Rabat-Kenitra	5 400 »
Safi	12,500 »
Marrakesh	7 000 »
Fez	7 000 »
Sidi Yahia	5 000 »
Oujda	3 500 »
ex-northern zone	4 500 »
Essaouira	2 300 »
Agadir	4 500 »

Local production

There are three sources :

a) **Deposits of rock-salt :**

Riff area (Taza and Tissa) and the Atlas region (Amassine and Tazzert)

Cancelled visible reserves are estimated at about a hundred million tons.

The working of the Taza and Tissa mines has come up against difficulties since 1961 but is now recovering.

b) **Salt-marshes**

The sea feeds numerous salt-marshes on the coast :

- Mediterranean (Nador)
- Atlantic (Larache, mouth of the Bou Regreg, El Adir, Oualidia, Oued Massa).

The marshes supply about one third of the salt produced locally.

The salt-works of Nador (Mar Chica) - 10,000 tons a year feed some canneries and the ENERGIE ELECTRIQUE DU MAROC.

The salt-works at Sidi Brahim (Oualidia) - 3-500 tons a year supply first quality white salt consumed by the gut-dressing works at Casablanca.

That at Biar el Assara (Oualidia) - 1000 to 2000 tons a year supply salt of the same quality.

c) The " sabkhat "

These are not all exploited or even inventoried. One of them however is of first importance for salt production, since more than 30 % of locally extracted salt comes from there. This is the " sabkha " of Zima, better known as " Laczima ". It has produced 30,000 tons of salt a year over the last few years but its capacity could reach 80,000 tons.

To summarise, the total national production of salt is estimated at about 100,000 tons. This estimate is very approximate since, apart from modern workings, there is a large number of small primitive workings, difficult to chek, but which play a considerable part in overall production.

Production programme

There is little point in establishing an exact programme since, owing to the multiplicity and the dispersion of deposits and the ease with which salt is extracted, supply can immediately be adapted to demand.

Moreover salt production is in the first place closely dependent on natural conditions (especially rainfall) and secondly there are numerous autonomous salt-works the activity of which fluctuates widely. Thus it is impossible to give estimates.

Consequently we cannot make estimates of investment, but we may note the organisation of production. In fact the salt-marshes are not entirely equipped in modern fashion and the deposits of rock-salt are still far from numerous and often insufficiently equipped to produce the proper qualities (refined salt) and thus Morocco has had to import to meet its requirements.

In order to reduce imports while stepping up production we must :

— intensify the working of rock-salt

— set up salt co-operatives uniting the small primitive salt-works in order to ensure control and continuity.

— Complete reconnaissance of rock-salt deposits and provide for extraction from the numerous sources in the country.

These measures, among other things, would enable the country to meet in the future the requirements of the industries to be set up under the Plan, especially chemical industries.

MINERAL WATERS

For some years Morocco has sought to take advantage of its thermo-mineral resources which are quite sufficient to feed a local market constantly expanding.

Apart from resorts already developed and likely to develop, such as Oulmes and Moulay Yacoub, there are springs known from antiquity the most important of which are Sidi Harazem and Aïn el Hamra.

The work and investment programmes are as follows as regards the catchment and utilisation of the waters.

1° **OULMES** : Liquefaction of carbon gas.

1965 :	Preliminary study	10,000 DH
1966 :	Completion	200,000 DH
1967 :	d°	200,000 DH

Installation and thermal establishments are a matter for the Public Health ministry.

2° **MOULAY YACOUB** : Creation of a second station :

Transporting the waters over two kilometres by a vinyl pipe embedded in insulated concrete.

1965 :	100,000 DH

The installation of a pool and a thermal establishment in the second station does not concern this department.

3° **SIDI HARAZEM** : Drilling with a view to feeding a bottling plant.

1965	Drilling Equipment of wells 500,000 DH
1966	Construction of plant for bottling 2,000,000 DH.

4° **AIN EL HAMRA** : an indication, no estimates.

III. — Private sector

RECAPITULATION OF INVESTMENT FIGURES

(in thousands of DH)

PRIVATE SECTOR	1965	1966	1967	TOTAL
— Iron	4.065	2.675	1.425	8.165
— Manganese	3.072	3.140	3.140	9.352
— Lead - zinc	6.590	6.340	6.340	19.270
— Cobalt	430	370	370	1.170
— Pyrrhotine	3.600	2.150	1.800	7.550
— Copper	842	467	467	1.776
— Antimony	500	750	200	1.450
— Tin	—	—	—	—
— Barytine	1.180	950	830	2.960
— Fuller's earth	35	35	35	105
— Fluorine	1.900	3.500	1.000	6.400
— Salt	—	—	—	—
— Mineral waters	610	1.800	200	2.610
TOTAL	22.824	22.177	15.807	60.808

II. – INDUSTRIAL PRODUCTION

I. – Balance-sheet and objectives

II. – Industrial sectors

1. – Balance-sheet and objectives

The effort to industrialise the country is one of the guiding principles of the Three Year Plan. Industrialisation is an ineluctable and permanent necessity for economic development. Therefore it will receive the Govenment's full attention and support. In fact the development of an industrial sector is essential to balanced growth and an indispensable means of strengthening the country's economic independence. These two factors make it permanent objective of our economic policy.

We should now draw up a rapid balance-sheet of the results achieved during the last few years and, in the light of our experience, determine the main pattern which our industrialisation policy should follow, as also the conditions in which these objectives can be attained under the Three Year Plan.

I. — Balance-sheet for 1960-64

In 1960 the industrial sector represented about 26 % of Morocco's gross internal product, that is a smaller share than that of agriculture.

Electric power and mines apart, industry proper only represented 16 % of our national product. It produced a wide range of consumer goods of various kinds. usually from imported semi-finished goods, and was only vaguely directed towards the improvement on the spot of our natural resources with a view to export. It only employed 8 % of the active population.

A sustained development of industrial potential was therefore essential, both in order to create new employment and to absorb a percentage of the younger generation old enough to work, to reduce our dependence on foreign countries, to accompany, in the initial phase, the priority development of the agricultural sector and prepare the secondary sector to be the driving force in our growing economy.

In this perspective the Five Year Plan, launched in 1960, had to achieve a 61 % growth of industrial production in five years, that is to say nearly double the rate accepted for the economy as a whole. 125,000 jobs were to be created, 40,000 of these in processing industries. After the Plan the share of industry in national production was to exceed that of agriculture, thereby enabling Morocco to " take off " in the economic development field.

The achievements of 1960-63 could not reach this goal. Industrial activity developed at a moderate rate. The index for industrial production went from the 1958 basis (= 100) to 111 in 1960 and 124 in 1963. This corresponds to a rate of growth of about 4 %, whereas the Plan provided for an average annual rate of 10 %. This figure actually covers some rather divergent evolutions. Power production rose at a rate of 12 % per year according to the plan estimate.

Mining production suffered from falling prices on the world market. It had been receding since 1961 and in 1963 it could not achieve the rate realised in 1960. Nevertheless phosphates are a remarkable exception since the production of this mineral increased by 15 % between 1960 and 1963. Processing industries grew at the rate of 5 % per year, less than half the estimate for the Plan. However, some sectors showed vigorous expansion. The textile industry, for example, showed a figure of 15 % and the fats industry 9.5 %. Others however showed only an insignificant rise, like leather, or stagnated like the metal processing industry.

In an even more marked fashion investments fell short of the Plan. A break-down of the product of gross investment shows that, whereas the Plan was achieved up to more than 85 % for public works and 80 % for building, there was serious delay as regards investment in equipment and machinery. Thess items in 1960-63 did not exceed even the amortization assumed by the Plan for that period. Moreover, since gross investment had taken place in numerous sectors, we must assume that equipment was not renewed normally in other branches, which led to wearing-out of productive capital. At the same time, although public investment in most cases attained its objective under the Plan, the private sector lagged far behind except in the sectors mentioned above. We must there fore analyse briefly the reasons for this delay and seek a remedy.

Nevertheless a regular flow of investment has been noted and the statistics of the Investment Commission enable us to appreciate its extent.

More than 860 millions of investment were the subject of the Commission's sanction from 1.1.60 to 31.12.64, but this figure does not give a precise idea of investment during that period. Agreement was sometimes given to projects which did not materialise or were delayed, or in respect of operations which could only be carried out in part. Conversely agreement was refused to projects which will none the less be carried out and some minor investments may not even have been submitted. Moreover the total amount does not include the Safi Complex for which the State had spent 114 million DH at the end of 1964.

We may also note that the above figure does not always correspond to net investment. Since certain advantages are granted not only to extensions of activity but to renewal of equipment it may be assumed that part of the operations approved by the Commission are the equivalent of a simple restoration of productive capital.

From 1960 to the end of 1964 the main sectors to benefit have been textiles with 164 operations representing nearly 423 million DH, foddstuffs (106 operations and 147 million DH, more than half for the Beth sugar factory) and mechanical industries (86 applications and 98 million DH). The number of people directly employed reached more than 17,000 in five years. Since the institution of the Investment Commission, advantages given to both foreign and local capital came to 56,659,400 DH distributed as follows :

Exemption from Customs Duty	22,746,600 DH
Equipment subsidy	13,892,800 DH
Exemption from Registration Tax	15,500,000 DH
Exemption from miscellaneous taxes	4,420,000 DH
TOTAL	56,659,400 DH

The BNDE (National Bank for Economic Development) played an important part in financing investments during the period. The amount of credits approved by this organisation since its foundation in December 1964, that is to say in four and a half years, come to more than 363 million of which 135 million was for direct loans, long and medium term. The balance represents mainly medium-term credits which are rediscountable. Direct operations are developing regularly and in 1963 they totalled 60 % of the total amount of approved operations. The total ofr investments benefiting from the BNDE's intervention is 800 million DH. This figure nevertheless overlaps with investments approved by the Commission.

Movement of capital by industrial companies is a significant, if less exact, indication of the evolution of industrial activity. The balance of these movements, after creation or increase of capital, or alternatively reduction of capital or dissolution, has been diminishing since 1961, going from 81 million in 1961 to 38 in 1962. One can nevertheless notice a recover during the first half of 1964 with a net total of 29 million.

The development of State participation continues. The sugar factory at Sidi Slimane, with a treatment capacity of 300,000 tons of beet, began construction in 1960 under the aegis of the O.N.I. The creation of other sugar factories is being studied and will soon be realised. Operations at the Safi Complex actually started up in

June 1962. Substructure work has been carried out and the Complex should be completed during the first half of 1965.

Thus the appearance of Moroccan industry has not changed basically since 1960. Apart from some particularly active sectors the rate of production has been insufficient. Investments have, generally speaking, stagnated and productive capital has in some cases been wearing out. Thus achievements for the period have been limited.

Although Morocco, thanks to the diversity of its advantages, has the right conditions for industrialisation, there have been a few handicaps.

A satisfactory substructure is the first condition for industrial development. In this respect Morocco has an important fund of capital, which is largely inadequately used. Iits natural riches are a second factor likely to encourage industrial activity. Finally, the country has already, thanks to a diversified industry, acquired valuable experience.

These favourable conditions are not however decisive. On the one hand, permanent factors have hindered expansion, arising from two basic characteristics of our economy: scarcity of markets and of factors of production. Perhaps these restrictions are in some ways inherent in the present stage of development. The modest dimensions of the local market in the case of many products, the lack of savings and reluctance to invest in industry, the rigidity of employment, the excessive cost of power - all these are obstacles which can never be removed at once. We should not overestimate these difficulties, the object of an industrialisation policy being precisely to overcome them by degrees. But we cannot emphasise too strongly that such a policy cannot be designed outside the outlook for development of the economy as a whole. In particular it is tied to the effort to be made in the agricultural sector; the motive force of which will determine our economic growth.

In fact, in an industrialised country where agriculture is still important and where the agricultural sector has a decisive influence on the whole of the economy, the agricultural sector buys much more from the rest of the economy than the other way round. Also the incidence of agricultural investment is more marked in a country where 75 % of the population belongs to the land. The Firts Five Year Plan could not envisage an industrial growth permitting the industrial sector to exceed that of agriculture without in the first place ensuring the future of agriculture.

At the same time two incidental factors may have caused this reserve on the part of investors. The financial situation, the gravity of which has been mentioned befo[illegible] undoubtedly a burden on industrial projects. But, beyond financial recovery, the Government will try to establish contacts between Departments concerned and private investors, not only to give them better information on the procedure for applying our economic policy but also in order to have a better idea of their anxieties in the face of the inevitable State regulations, as well as their intentions as regards investment, in order to be able to co-operate more closely in the study of projects while helping them to overcome their difficulties.

II. — General pattern of the industrialisation policy

This involves a systematic search for markets and the creation of fresh employment by rational use of capital.

A. — The search for markets

In the first stage of the programme we must study attentively the outlets for production. We may look in three directions: satisfaction of local consumption, export of national resources in the form of products containing the highest possible measure of local value, production of semi-finished goods and equipment necessary for processing industries working for the national market. We should examine more carefully these three types of industry.

The home market represents the first outlet for the home industry, but, owing to the low standard of living, the outlook for development remains, on a short and medium-term basis, outside some industries for wide-spread general consumption. On the one hand, the urban population is only a quarter of the whole and the development of secondary and tertiary activies only brings at the outset a moderate increase in employment which slowly spreads an improved standard of living. On the other hand, the rural population, which mainly lives in a non-monetary economy, can only have access to a limited amount of consumer goods. Moreover, the rising birthrate restricts the increase of income available per head and the diversification of products we seek can only take place very slowly.

The outlook for development to-day in this direction is not indefinite. Some rapidly growing sectors, owing to sustained demand and the possibility of replacing imported goods by national products, will continue to expand. For example, we may take the case of textiles and the sugar industry. As for other branches, the size of the market is a determining factor in the decision to invest. The internal market should guarantee production units the chance of paying their way. The minimum size of production units is continually growing with technical progress. In some cases production capacity is insufficiently employed and it would be unreasonable to hope for their immediate expansion.

The development of thes industries should, wherever possible, be facilitated by the protection of the local market. Such protection should be sufficient to enable production to turn over at a reasonable rate. Protection should be a stimulus to industrialisation, but it should not harm the interest of the consumer. In particular it should not render local industry unsuitable for export by shifting lower prices to a higher level. In principle, Moroccan tariffs conform to this general view. However the policy will be adapted in order to bring down excessive protection or to reinforce assistance hitherto insufficient. The administration proposes ultimately to study a guarantee of tariff protection. This tariff policy will be more efficient if the Customs lists are revised. Gradually quotas will be reduced with a view to their ultimate abandonment, when protection will be no longer needed. Nevertheless, it will be maintained in some cases to favour the creation of new industries but with a duration always limited to a certain number of years. A total embargo on imports may even be contemplated to protect local industry against unfair competition, provide this embargo is absolute and only concerns strictly defined products.

The development of industries for export it a prime objective. Moreover it helps the balance of payments. It is based mainly on utilisation of natural resources, such as canned fruit and vegetables, fish, phosphatic fertilizer and paper pulp. It may extend to the processing of raw or semi-finished goods which are imported. However, this latter type of activity for export should only affect non-bulky goods with a strong admixture of local value.

On a long-term basis such a formula must develop, but in the near future it will only be applied to particular cases owing to the high cost of power in Morocco and the the competition of countries with low labour costs. Generally speaking, the orientation of our industry to exports must involve highly productive techniques, a competitive wage structure and a permanent effort to look for external markets. The Government must do everything to ensure a favourable basis of financing for investment in power production and to lower the cost of power for industry.

Parallel to the production of goods to satisfy final demand, national industry should tend progressively to produce the greatest possible portion of intermediary goods in the industrial cycle. In theory we can imagine two distinct conceptions of industrial development, either from basic industry or from top to bottom, that is to say from consumer goods to semi-finished goods and equipment. In reality one of these theories should not prejudice the other. Owing to the importance of processing industries already existing in Morocco it seems more certain and more realistic for the moment to go back gradually over the process. It is thus probable that the size of the textile industry may allow us to envisage in the foreseeable future a chemical industry for textile fibres. Nevertheless basic industry must not be neglected. Encouraged from the point of view of economic independence, these industries can, by their very existence, help to create other enterprises. But generally they have an additional value which is relatively low compared with the volume of investment and they scarcely contribute to the development of employment. Thus they can only be justified on two conditions : the production unit must ensure, taking into account the size of the home market, sufficient profitability on the capital invested, if it is not to impoverish the country rather than enriching it. It must use the ost highly developed processes in order not to be outstripped too soon by technical advances. Obviously both public and private industry must study the market attentively.

B. — Creation of fresh employment by rational use of capital.

Just as agricultural development supposes types of intervention adapted to the technical level of different sectors, so the industrialisation policy must differ according to the objective and the needs to be satisfied, all the while dominated by two basic considerations the creation of the greatest possible number of jobs and the rational use of capital.

No doubt these two considerations are up to a point contradictory. Expansion must come through modern techniques, the most capitalist techniques Conversely intensive use of capital only slightly helps to solve the employment problem. However, in so far as Morocco's industrial development will be carried out by diversification, the two orientations may be reconciled in a satisfactory manner.

In the majority of industries, however serious the employment problem, general interest demands that we should not hamper the use of modern techniques for better production even to the detriment of one or two jobs. By moving systematically towards a slightly capitalist solution, Moroccan economy would lose all chances of being competitive without entirely absorbing the excess of manpower.

However certain sectors may move towards production methods using simple equipment adapted to the systematic employment of manpower. But such an experiment can only affect some very definite activities. It affects housing and local civil engeneering, especially some sectors in metal processing. It can also help to promote artisan activity by creating semi-industrial production units using more advanced techniques with a modest rate of investment. Nevertheless, we should avoid costly improvisation undertaken without reference to comparable experience abroad. Moreover such action supposes beforehand an effort by the Government to encourage genuine artisans' co-operatives and, after the experimental stage, the creation of a technical assistance and financial organisation to carry out this indispensable policy.

On the other hand highly capitalist solutions should be preferred in basic sectors for activities where rapid technical changes lead to a choice of the most modern solutions and those orientated towards export. In view of the scarcity of available capital, we must be especially exacting with regard to the profitability of projects and bring our calculations up to date, which may lead us to abandon projects where the actual cost is too high having regard to the capital involved and the size of the market.

III. — Conditions for the realisation of an industrialisation policy.

The Government has not only to lay down the general aims of an economic policy. It must also work to continue its intervention and stimulation enabling these objectives to be achieved. Thus the orientation explained above will only guide industrialisation effectively if certain conditions are fulfilled. The Government, with this end in view, will adopt measures in the three following directions :

- — to improve and organise the labour market,
- — to channel capital towards financing industrial projects,
- — to define the procedure for intervention by the State.

A. — Improvement of the organisation of the Labour market.

Although Morocco possesses a labour force which far exceeds the present requirements of its industry, the employment situation is in many ways a bottleneck for industrialisation. Thus, while pursuing a policy aimed at providing for the industrial worker's well-being, we must arrive at an adequate mobility of manpower and a constant adaptation of resources to needs at all levels of qualification. This effort is necessary in any case owing to the growing incidence of technical progress on employment ; it is parcularly essential to-day in order to pursue the Maroccanisation policy in a satisfactory manner and to contribute to the establishment of a better wage scale. On a long-termn basis it is a condition for the growth of national industry since, our wage rates being higher than that of most other comparable developing countries, we have to move towards production demanding a highly qualified labour force.

Proper working of the labour market presupposes the adaptation of professional training to the demands of industry and the possibility of knowing with sufficient exactitude the extent of demand from employers and the supply of labour. There must therefore be an indispensable contact between those in charge of training and the heads of firms, while at the same time there must be a proper system of taking on labour.

Hitherto it does not seem that these conditions have been entirely satisfied. The creation of an Under-Secretary of State for technical education and training will enable us to enter on a dynamic policy and we should recall what the principal factors are.

A Training-Employment Committee consisting of the public authorities and the private sector will have to lay down the training policy and ensure co-ordination. In particular it will select for each industrial project being studied the solution to be adopted with regard to training. It will also take charge of the organisation of short courses for pupils of the technical schools. This scheme, which has been successfully tried out, has the advantage of familiarising young men entering industry with the practical aspects of their profession.

The improvement of the system of taking on staff requires that the labour exchanges should be better used. More open co-operation between firms and the Ministry of Labour should help to enable the labour exchanges to do their real job, which is to act as an intermediary between supply and demand of labour. Moreover, in order that Moroccanisation may be pursued efficiently, decisions on work contracts should be reached after consultation with the Ministry of Industry or ministries concerned with a view to the circumstances in which foreign workers may be replaced.

On a longer term basis we should not underestimate another form of professional training the example of which has been shown to us by some of the more developed countries, Italy and Spain, that is to say temporary emigration of workers under bilateral labour conventions concluded by the Moroccan Government with several foreign countries. In fact these workers will be able to acquire abroad a background of training which will stand them in good stead when they return to industrial jobs in Morocco. With regard to these conventions we must make sure that really qualified workers do not in fact emigrate.

B. — Channelling capital towards financing industrial projects.

One of the most important aspects of Government policy towards industrialisation is encouragement of industrial projects by a number of measures aiming at restoring confidence and channelling Moroccan private capital and foreign capital rewards productive investment.

Internal saving still plays a minor part owing to its restricted volume and its reluctance to invest in industry, as well as the existence of floating capital on the look out for transfers rather than investments. Although Morocco has for several years received an important contribution from external capital permitting a rapid development of equipment, it can be seen that foreign capital is more and more shy of investing in this country.

During the last few years national savings has represented about 11 % of gross internal production. Probably this rate — one of the lowest in the world — can only slowly be improved owing to a rising population and the development of private consumption which is so desirable. Nevertheless, while bearing in mind the needs of the Public Treasury, available savings can still be more distinctly orientated towards the productive sector.

Speculative transactions, whether in land, building or commerce, and espacially those concerned with blocks of flats for example, attract capital because of the high return. The Government will take the necessary steps to turn savings towards productive investment, without thereby hampering housing and building activity.

As soon as a better scale of remuneration has been established between operations involving land and productive investment, different measures may be taken to channel this capital into industry.

The ultimate aim of this policy is to promote a real financial market, but this development, however desirable, will, it seems, be hard to realise in a short time and only a few tentative steps can be taken during the three-year period. At the same time such steps can only be taken when the financial and monetary situation has improved.

The Government has recently introduced legislation to set up investment companies, one of which would be Moroccan. The aim is to throw open the Stock Exchange to a wider public. The Moroccan company will formed under the patronage of a semi-official body like the B.N.D.E. or the Caisse de Dépôts e t de Gestion and would take shares in any undertaking which appearred to be reliable. It could, in particular, take over from the State in the case of companies created by the joint initiative og the State and the private sector and which have already passed through the difficult initial stage.

Other financial circuits can also be created : the issue among the public of redeemable bonds by the B.N.D.E. and the use of a mechanism of transforming short-term loans. The Caisse de Dépôts et de Gestion has adopted this method and is pursuing an active participation policy.

Liberalisation of the conditions for using the new F.N.I. (National Investment Fund) reserve should also have a good influence in favour of investment.

Taken as a whole, these measures aim at gradually ensuring better working of the different savings markets and thus encouraging investment. Nevertheless, owing to their technical nature, these measures cannot on their own solve the problems of industrialisation. We must study attentively the procedure for economic intervention on the part of the State.

C. — Procedure for State intervention.

Previous years have seen the formation of new institutions in the public and semi-public sector which have done much for industrialisation, but the complex procedure and the multiplicity of instruments needed to carry it out, have often made for inefficiency. Thus the Government propose to concentrate on the definition of its policy of intervention, and encouragement, as well as the perfection of its methods making for clarity, stability and efficiency.

As for direct intervention by the State, two fields must be carefully distinguished. On the one hand the Government, by means of national undertakings or majority share-holding, has effective control over some sectors which are given priority owing to their importance to national independence or economic development. The Government wishes to emphasise clearly the consistency of a public sector which is non-competitive as opposed to the sectors where private enterprise can work freely. The two main criteria for the distinction of these two branches are stated further on after the paragraphs on private capital.

On the other hand the State intends to continue its minority share-holding but in a more empirical and flexible way. In fact, public funds will provisionally relieve Moroccan private capital. Conversely these funds will refrain entirely from investment where private enterprise is sufficient. The existence of these funds should not imply any high-handed control in favour of public share-holders or any interference with the law of competition. Finally, apart from cases where the State seems to be the best long-term partner for foreign capital, it should hand over to the private sector as soon as possible. This will make money available for new State intervention elsewhere.

At the same time the B.N.D.E. has embarked on a policy of capital participation in companies carrying out an investment programme.

The State can also stimulate industrialisation by developing and encouraging industrial studies. However, in this field there is insufficient co-ordination and a too obvious preference for particular projects to the detriment of systematic surveys of the situation in different branches — structure, markets, competitive effort and relations between industries. This situation will be studied and rectified.

Private capital, national and foreign.

As regards foreign capital in particular, the policy of encouragement existing for some years should also be made more effective. The system of assistance given to industrialisation already in force is quite suitable and it is necessary not so much to modify it as to give it better application and create a general atmosphere of confidence which will encourage the mobilisation of local capital and the entry of capital from abroad.

Under the investment Code a number of measures for tax remission and subsidy are provided for to help new undertakings for the extension of production potential. These measures would be more effective if they were semi-automatic. Cases in which businesses may benefit would be very clearly definied and advantages would be conferred as a right unless the Commission records an unfavourable decision within three months from all the necessary papers being presented.

A system of semi-contracts could also be set up. In return for the exceptional privileges accorded beneficiaries could make special undertakings with policy and objectives arrived at together. Whereas the conclusion of these semi-contracts would be the responsibility of the State, their implementation would be the work of public organisations which are already acting in this way on the State's behalf. As regards industrial enterprises local, local sub-contractors, who at the moment account to an appreciable extent for the supply of equipment, might make a greater effort to increase their participation. In this connection the State will continue its policy of encouragement.

The Government will endeavour to gain the confidence of private investors by defining clearly from now on the respective scope of public intervention and private enterprise. Thus it has decided that in future the State will only intervene in two sets of circumstances, viz:

1° Where the private sector is found wanting in one branch or the other. In this case a procedure for consultation will be provided.

2° Where a bottleneck occurs in a given branch which handicaps private enterprise and cannot be remedied except by State intervention.

As we have seen, this definition by no means excludes voluntary effort by the private and public sectors and, in the sense explained above, a continuation of the policy of public participation.

Moreover the State henceforth officially assures investors that:

1° There will be a guarantee of a stable fiscal policy for at least five years and additional fiscal benefits may later be negotiated.

2° Apart from foreign investors, the State unequivocally confirms the guaranteed transfer of capital, especially the handing over of assets and the transfer of profits within the limits already defined.

This general policy and the determination to create an atmosphere of confidence should show itself by continuous and methodical action in day-to-day administration.

As for the practical outlook for industrial development, projects approved but not yet realised, projects studied by administrative departments and survey organisations, as well as the possibilities made evident by a serious evaluation of the requirements for finished products and intermediary products in this country at the end of 1968, make it possible to look forward to the achievement of industrial investment, both public and private.

A detailed analysis of development possibilities offered by the various branches of industry is given in an appendix to the public equipment programme for 1965-67.

Table 1: Gross investments carried out from 1960 to 1964
(in millions of dirhams at current value)

	1960	1961	1962	1963	1964 (1)
Equipment	358	401	409	567	574
Building	250	278	270	325	353
Public Works	310	371	464	498	489
TOTAL	918	1.050	1.143	1.390	1.416

(in millions of dirhams 1960 value)

	1960	1961	1962	1963	1964 (1)	TOTAL 1960 - 1964
Equipement	358	378	368	484	478	2.066
Building	250	265	250	285	302	1.352
Public Works	310	354	432	440	422	1.958
TOTAL	918	997	1.050	1.209	1.202	5.376

(1) Provisional.

Investissements ayant donné lieu à un agrément de la Commission des Investissements

(Montant par secteur — en milliers de DH)

	1959	1960	1961	1962	1963	1964
Textiles	27.000	40.000	19.000	20.000	40.000	69.255
Industries alimentaires	2.000	7.000	9.000	15.000	100.600 (1)	14.870
Industries mécaniques	5.000	15.000	10.000	13.000	15.480	51.665
Chaussures	—	1.000	2.000	3.000	120	2.050
Détergents	6.000	700	1.000	26.000	1.180	375
Pêche	—	3.000	700	400	600	1.150
Pétrole	6.000	10.000	300	—	—	3.300
Mines	—	700	—	—	—	—
Bijouterie	—	200	300	50	—	15
Maroquinerie	—	70	700	1.100	9.900	245
Pneumatiques et caoutchouc	—	—	—	600	4.250	810
Plastiques	—	1.000	4.700	500	190	2.715
Articles ménagers	300	—	—	—	—	—
Cartons	—	6.500	3.000	1.200	5.800	3.745
Divers	300	16.500	49.750	16.100	137.150 (2)	9.710
	46.600	101.670	100.450	96.950	315.270	
Tourisme						16.960
Armement maritime						49.800
Pharmacie						6.300
						232.965

(1) Dont : Sucrerie du Beth : 76.000
SITAVA : 16.000

(2) Dont : HILTON : 30.000
EUROPAHOTEL : 40.000
COMANAV : 53.600

Source : Secrétariat Permanent de la Commission des Investissements.

INVESTMENTS APPROVED BY THE COMMISSION (in thousands of DH)

GLOSSARY

"alimentaire" = food industry

"chaussures" = shoes

"bijouterie" = jewellery

"maroquinerie" = Morocco leather goods

"pneus et caoutchouc" = tyres and rubber

"articles ménagers" = household articles

"armement maritime" = shipping.

WORKING METHODS USED FOR STUDYING AND DETERMINING THE OUTLOOK FOR THE ECONOMIC DEVELOPMENT OF INDUSTRIAL ACTIVITY DURING THE PERIOD 1965-67

With this object in view the following surveys have been undertaken:

I. — **Determination of requirements in 1963.**

1963 having been selected as the year of reference, the needs of the local market have been determined by seeking first of all to ascertain the volume of imports and of local production, the total of which corresponded to the quantities available for marketing (home market or export).

Units of measurement used are, as the case may be, tons, metres or numbers of articles, which helps the work of survey since this must must be established in "constant dirhams". However, in some cases it was thought more reasonable to work in dirham values owing to the variety of products (pharmaceutical, perfumery etc.).

2° **Determination of requirements in 1968.**

Starting from 1963 figures the growth of demand up to 1963 has been determined by two different methods, used alone or concurrently according to the case involved:

a) A study of market evolution. The comparative results of the surveys on production and imports for the years of reference with regard to the Five Year Plan and the Three Year Plan have shown the progress of industrialisation and the evolution of the market. Any anomalies have been examined to determine whether these were due to technical evolution or by the incidence of economic factors. Bearing in mind these amendments it has been possible to project the growth of the market into 1968.

b) An enquiry into the consumption of households and the birthrate. A knowledge of the statistics for the rise in population, projected into 1968, has enabled us to estimate future consumption by households.

The first method is more suitable for following the growth of requirements for equipment, while the second gives a better estimate of essential needs (food, clothing etc.). A comparison of the two estimates has allowed us in some cases to make a better approach to the facts of the matter.

In any case these results can only be considered as approximations in order of magnitude since there are too many extraneous factors the incidence of which is as significant as the market is restricted.

3° Determination of production capacity

The determination of production capacity and the comparison of the latter with estimates for consumption enables to decide whether the equipment of the country can satisfy the estimated demand.

Whenever the available margin is inadequate it is proposed either to extend existing undertakings or to set up new plants (in cases where production forecasts make this profitable).

4° Investments.

The creation or the extension of undertakings requires investments the value of which has been determined by comparison with achievements or projects of the same type, carried out or in the process of being carried out. Employment created has also been determined by analogy.

5° Conclusion.

Consumption estimates have been quoted above. But the possible discrepancy between probability and reality is not such as to modify radically the nature and importance of the plants neede to meet the demand. There are therefore no major corrections to the estimate of the outlook for economic development.

SECTION I

Metallurgical industries

I. — IRON AND STEEL

The project for an iron-and-steel industry has been studied for several years, both technically and economically, and all possible variants have been examined taking into account technical processes, the estimated market and the quality of products to be manufactured.

In short, three possibilities are open to us, all interesting from different points of view, viz:

A) **Solution 1: electric steelworks - merchant iron rolling mill.**

1. — **Main objective**

This solution consists essentially of a steelworks and a rolling mill for merchant iron, iron bars and machine-wire for the local market.

The plan envisaged leads plenty of latitude for the growth at a given moment of the Moroccan iron-and-steel industry towards a stage of development enabling us to create supplementary units, such as reduction and hot-rolling of metal, activities which at present could not be made to pay.

2. — **Essential characteristics**

2-1. — **Supplies and labour**

Raw materials

Scrap-iron	20-45,000	tons per	year
Iron ore	800	»	»
Lime	5000	»	»
Spath fluor	400	»	»

Imported raw materials

Scrap-iron	30-50,000	tons per	year
Coke	400	»	»
Ferro-alloys	1100	»	»
Electrodes	500	»	»

Electric power (basis 70,000 tons per year of finished products)

Electricity: 63,000,000 KWH/yr.
Installed power: 13,000 KW
Fuel-oil: 4000 tons/yr.

Utilities

Water: 1,500,000 m3/yr.

Personnel: About 500 persons.

2.2. — Production capacity

Total capacity of the installation is about 120-140,000 tons/yr. Working two shifts it will be easy to meet local demand, which at present amounts to 70,000 tons per year for the products to be manufactured, which are:

45,000	tons	a year	of concrete bars
8000	»	»	» light sections
14,000	»	»	» machine-wire
3000	»	»	» flat products.

2-3. — Value of investments

Equipment FOB, erection and engineering	48.00 million DH
Civil engineering, various buildings	37.00 »
Working capital	10.00 »
Total	95.00 million DH

Registered capital would be 20 million DH, the remainder supplier credit.

2-4. — Location

In the Casablanca area, the main marketing centre for such products and for collection of scrap.

In this area the location of the plant within the A.I.A facilities would have definite advantages:

— On the one hand the engineering complex already contemplated at the A.I.A will ensure an outlet for about 15,000 tons/yr. for various products.

— On the other hand the integration of the plant with the Engineering Complex will mean that it can take advantage of the existing substructure and a reduction in transport costs and overheads.

3. — State of progress and option

Technical engineering study and economic study completed.

Tenders were invited at the end of 1962. The answers contained proposals for financing the plant covering almost the whole investment.

As a variation it might be decided to install the rolling mill only and to import billets as a raw material.

4. — Advantages of the project and conclusions

Advantages are:

— An import gain in foreign currency estimated at 25 million DH.

— Creation of a basic industry to aid industrial development.

— The project should pay its way and make a profit.

State participation in this project seems to be justified. The 20 million DH required should be available as follows: 5 million available on 1.7.65, 10 million in 1966 and 5 in 1967.

— Start-up: end of 1967.

B) Solution 2 - **Merchant iron rolling mill.**

At a first stage we could dissociate the rolling mill from the rest of the plant as planned in Solution 1, that is the electric steelworks and continuous casting. The installation would then consist of a single rolling mill able to produce a wide range of merchant iron, mentioned in the semi-integrated plant, from billets imported as raw material.

The plant could be integrated to the engineering complex as part of the reconversion of the A.I.A (Ateliers Industriels de l'Air) at Casablanca, thus taking advantage of the existing substructure and buildings.

This solution would have the advantage that it would considerably reduce the amount of investment, which would thus be brought down to about 50 million DH from 100 million. Nevertheless the gain in currency would also be reduced by half (15 million instead of 30 million before financial charges for an annual production of 70,000 tons):

Up to 30% of the investments are provided by long-term loans at low interest. Moroccan and foreign capital has shown itself willing to take shares in the registered capital of the company which carries out the project. This capital amounts to 20% of the investments, or about 10 million DH.

Since a rolling mill takes at least two months to construct and an electric steelworks with continuous casting only one year, we should save about 3.5 million DH in interest during construction by making the order for the electric steelworks later than that for the rolling mill.

Postponement of the construction of the electric furnace and the continuous casting in relation to the rolling mill will enable us to await the results of the decopperizing of the pyrrhotine cinders to make sponge-iron. It would thus in fact be possible to replace imported scrap for manufacturing steel in the electric furnace. These results might have a remarkable effect on the design and engineering of the furnace.

An extra advantage would be to limit the difficulties over technical assistance and professional training. In fact, if it were decided later on to install a semi-integrated steel plant (electric furnace, continuous casting and rolling mill) it would be enough to add an electric plant with continuous casting to the existing rolling mill.

In the same way, if it were decided to install an integrated plant at Nador with a blast furnace, steelworks and continuous casting, billets ould be produced at Nador and transformed into merchant iron at the rolling mill in Casablanca. This solution would not be more costly than the installation of a rolling mill at Nador, for 80-90% of merchant iron produced would in any case be marketed from Casablanca.

N.B. — To carry out Solution 1 there is a danger that local production of scrap may be insufficient to feed the electric plant. On the other hand, if is intended to install Solution 3 (integrated plant) in a relatively short space of time, an electric plant seems advantageous.

we are thus inclined to think of installing, as part of Solution 2, the rolling mill provided for under Solution 1, Without installing either the electric furnace or continuous casting.

This solution would have the additional advantage that it would considerably reduce investment costs, which would be brought down to about 50 million DH and it could be more easily integrated with the existing substructure (no large demand for electric power). Moreover training of personnel would be less of a problem. Finally, if we installed an integrated plant this rolling mill would find its logical use as a finishing mill.

On the other hand the saving in foreign currency would be less in the case of Solution 1, since the installation of the rolling mill alone presupposes the import of semi-finished products in the form of billets. At the same time the electric furnace in Solution 1 would consume an important amount of power which would have a beneficial effect on the Roches Noires plant.

Solution 3. — **Integrated plant**

1. — **Main objective**

Since the basic purpose of an iron-and-steel industry is to make the best use of local raw material, especially iron ore, this solution consists of a complete unit turning out siderurgical products from Moroccan ore.

This solution raises straight away a marketing problem, since this type of siderurgy is only profitable after reaching a point situated around 300,000 tons per year, or about double the demand of the home market at the present time.

At the same time investments would be heavy, about 500 to 600 million DH for a capacity of about 300,000 tons per year.

2. — **Essential characteristics**

Definition of this solution is at present less precise that that of other solutions owing to the dimension of the project and the state of progress made in studies.

Nevertheless we can, from the technical point of view, make the following estimate: Reduction method - One blast furnace fed by local ore and imported coke.

— One LD steel plant (oxygen blast)

— Continuous casting for billets and slabs

— One rolling mill to finish billets for making merchant iron, small sections a bars and wire.

— One cold rolling mill and a finishing unit for thin sheets (stamping, galvanising).

N.B. — This unit would work with imported coils since a plant to produce thin sheets by the hot process would not be profitable.

Maximum estimated tonnage would be about 300,000 tons a year, or:

100-120,000 round products

150-200,000 flat products.

The overall cost would be 500-600 million DH.

The plant could be located somewhere in eastern Morocco, near the Riff mines, subject to a lay-out survey showing the technical difficulties which might be encountered and giving figures for the necessary expenses and the regional substructure.

II. — OTHER METALLURGICAL INDUSTRIES

A) The metallurgy of Zinc

At present Morocco exports the whole of the zinc concentrate produced in the mines. It is now intended to treat some of it locally.

The market

Moroccan consumption of zinc is still very small. In 1962 the country produced 700 tons in all, mainly used for galvanising or in the form of sheets and plates.

To this tonnage must be added 600 tons of zinc oxide which might be produced from the metal.

In 1967 this consumption will have shown regular growth and will amount to about 1000 tons for the metal and 1000 for the oxide. On the other hand, if a zinc plant were set up, it would be necessary to create a plant for products moulded in zinc alloys which would consume some hundreds of tons of metal.

The main market is therefore for export. The Common Market imports zinc ore but has an excess fusion capacity, so that duty is has been imposed on import of the metal.

Morocco must look for an outlet outside the Common Market.

World consumption of zinc is rising but it is subject to periodical crises.

Definition of the project

The technical process proposed comprises: roasting the ore, blast furnace and zinc condensation, refining, a sulphuric acid unit; this process means that mixed ores, lead-zinc, could be treated and lead could also be produced.

The electrolytic process was studied but would require electric power at 2 frs. per KWH.

The capacity of a standard blast furnace is 30,000 tons/yr. of zinc metal and a variable quantity of lead, about 20,000 tons/yr.

Location

The largest reserves of ore are situated in eastern Morocco.

Investments

Machinery	54 million DH
Civil engineering	14 » »
Buildings	14 » »
Working account, engineering licence	13 » »
	94 million DH.

Items for buildings and civil work could be ordered in Morocco.

The problem of reserves

Apart from the technical problems of the plant as such, it is clear that the problem of reserves of zinc ore is a fundamental one, since Morocco does not on its own possess enough reserves to guarantee supply for several decades. To ensure supply in satisfactory conditions we shall have to consider the whole of North Africa.

Economic consequences of the project

— Jobs created : about 350, including :

Management and higher staff	8
Employees	17
Foremen and technicians	30
Professional staff	25
Specialised staff	200
	350

Training

Trained technicians will have to take a supplementary course.

B. — The metallurgy of lead

a) The Oued El Heimer foundry

This unit, installed several years ago, treats the ores of eastern Morocco. Morocco exports each year about 100,000 tons of concentrated lead ore and treats 35-45,000 tons at this foundry. Silver and antimony contained in the ore are recoverable.

Production for 1963 was:

— 18,000 tons of refined lead
— 20,000 tons of silver
— 250 tons of sodium antimoniate.

The Market

Local consumption of lead metal is slight (5-600 tons of lead pipes manufactured in Morocco and 200 tons of sheets and imported bars).

Almost all the lead turned out is therefore for export and mainly to France.

The international market for lead has been poor for the last few years, since consumption does not rise very fast. An international Lead and Zinc Committee was formed to co-ordinate production and find fresh markets.

Production objectives for the foundry

In 1963 the Oued Heimer foundry considerably reduced its production potential by laying off one workshop using a peculiar technique for which it was impossible to find the right quality of ore in that area.

Production of the foundry, in the shop which continues to function (water jacket) will be about 15,000 tons per year of refined lead, with, as a by-product, about 18,000 kg. of silver and 200 tons of sodium antimoniate representing an FOB value of about 20 million DH (present value).

b) Development of lead production

According to statistics for the production of Moroccan lead ore and lead metal, it should be possible to raise the production of lead considerably from Moroccan ores, which incidentally have abundant reserves.

Surveys carried out by the Mines Department show in the first place the connection between this project and the zinc metallurgy project. In fact one of the processes proposed for zinc metallurgy can also produce lead, i.e the blast furnace.

For the capacity provided for, 30,000 tons of zinc, the unit would produce about 20,000 tons of lead.

Bearing in mind the international market for lead, and the need to conserve a certain quantity of ore for export, it does not appear that there will be room for a third lead foundry in Morocco if a blast furnace for zinc were installed.

On the other hand, should the blast furnace process not be adopted for zinc metallurgy, we might contemplate the production of lead.

Two possibilities may therefore be considered:

— Extension of the capacity of the foundry at Oued el Heimer by addition of a second unit for water jacket (15,000 tons/yr.). The problem addition of a second unit for water jacket (15,000 tons/yr.). The problem to be studied would be the supply of the foundry with ores from western Morocco, for the eastern ores alone would be insufficient.

— Creation of a production unit in western Morocco to produce 15-30,000 tons of lead (according to the possibilities of ore supply) treating the ores from the western area.

C. — Copper and miscellaneous metals

a) Copper

Morocco exports copper concentrate as follows:

1959	3900	tons
1960	5200	»
1961	5000	»
1962	7000	»
1963	6300	»

with metal contents varying between 13 and 40%, which means about 200 tons of metal in 1963.

This production is distributed over 7 mines on Moroccan territory.

The copper market

This production is nothing in the face of the world copper market.

On the home market statistics show:

— export of copper scrap pre-refined in Morocco:

1959	1560	tons
1960	1540	»
1961	1440	»
1962	1200	»
1963	1500	»

— import of semi-finished products, mainly in electrolytic quality bars copper and brass sheets and miscellaneous items:

1959	1100	tons
1960	2265	»
1961	1930	»

The electrolytic quality bars are transformed into electric wire and the sheets are used to manufacture ustensils and for handicrafts.

Total requirements for copper can be estimated at about 3500 tons of metal for 1967, but a large portion of this (bars sheets) raises the problem of the first transformation process (rolling).

Object of the work

A survey carried out by the Mines Department shows that the reserves of the mines being worked at present are small (only a few years working). Besides, the inconsiderable tonnage consumed on the home market would make it hard for a metallurgical industry only processing copper to pay its way.

Nevertheless the treatment of the copper ore can be attached to the Safi complex, which is to recover this copper from the roasting of pyrrhotine cinders. In the conditions prevailing at the Complex this system of recovery is a more profitable utilisation of a by-product. We may therefore imagine, if the techniques used there prove suitable, that the whole or a part of Moroccan ores should be also treated there. The result would be a production of some thousands of tons of copper which would be added to the copper recovered from waste material.

Finally the Mines and Geology Department is following the geological research carried out with a view to improving reserves by following up indications hitherto unexploited and also in the mines already being worked.

b) Other metals

The possibility of treating metals such as antimony, cobalt, tungsten, nickel etc. are usually restricted by the following difficulties:

— low production and low reserves of Moroccan mines

— Low internal consumption

— Peculiar requirements for power (e.g the need for cheap electric power).

The Mines and Geology Department keep an up-to-date inventory of these problems with a view to carrying out surveys whenever conditions are more favourable (development of consumption or increase of reserves thanks to geological research).

⁂

SECTION II

Processing industries

1) Wire-drawing, wire-nails

	1963	1968
Production	3894 tons	8000 tons
Capacity	7500 »	9500 »
Imports	7275 »	7500 »

Since 1959 the rate of growth of this sector has been 10% per year and it is tied up with that of building.

New manufactures from wire will increase demand and may help to step up activity.

Local industry might the able to produce galvanised wire with an extension.

Estimated investment: galvanisation	200,000 DH

Jobs created: 20

2) Netting and wire gauze

	1963	1968
Production	976 tons	1000 tons
Capacity	1400 »	1400 »
Imports	249 »	250 »

Imports have dropped, traditional uses have declined and no investment is provided for.

3) Steel cables

	1963	1968
Imports	859 tons	250 tons
Production	0 »	1100 »

Development of mechanical handling will bring an increase in the demand, which had slackened in 1963 (1225 t. in 1962).

A plant able to produce 1200 tons is contemplated to satisfy requirements in the most usual sizes. This production might be associated with the production of steel tubes.

Investment: 13,000,000 DH

Jobs created: 1000.

4) **Steel tubes**

	1963	1968
Production	0 tons	4600 tons
Imports	9000 »	4500 »

The volume of requirements varies according to the irrigation programmes. Water supply at Khouribga had necessitated a volume of imports with the result that overall demand rose to 11,235 tons in 1962.

A welded tubes plant could be set up within a cable factory.

5) **Processing of aluminium**

	1963	1968
Production	507 tons	650 tons
Capacity	600 »	700 »
Imports	1672 »	1450 »

The rate of growth of demand is regular. 1962 imports were equal to 1186 tons and the average pace was 4% faster than in previous years. 1963 was an exceptional year and is not considered for estimates.

The natural extension of this sector and the effort being made to intensify production of household goods means that we may expect it to be applied to new uses.

Estimated investment: 3,000,000 DH

Jobs created: 50.

6) **Processing of lead**

Rolling and spinning is already being done. To meet the needs of sulphuric acid plants rolled pieces 2 metres wide will have to be produced. We may therefore consider welded rolled iron or a new rolling mill.

Estimated investment· 100,000 DH

Jobs created: 0.

Initial processing of ferrous and non-ferrous metals

Activities in 1963

ACTIVITY	Unit	Productions	Imports	Resources	Exports	Consumption
Wire-drawing etc.	Ton	3.894	7.275	11.169	21	11.148
	M. DH	3.832	5.834	9.666	30	9.636
Netting, gauze	Ton	976	249	1.225	—	1.225
	M. DH	19.517	400	19.917	—	19.917
Steel cables ..	Ton	—	859	859	—	859
	M. DH	—	2.024	2.024	—	2.024
Tubes	Ton	34	9.393	9.427	—	9.427
	M. DH	235	11.613	11.848	—	11.848
Aluminium ..	Ton	507	1.672	2.179	39	2.140
	M. DH	4.841	6.828	11.669	119	11.550

II. — MANUFACTURE AND ASSEMBLY OF EQUIPMENT

1) Casting and brass-founding

	1963	1968
Production	4647 tons	6700 tons
Caacity	10,200 »	10,200 »
Imports	2418 »	1500 »

Imports in 1963 largely exceeded those of 1962, thus restricting local production.

Requirements for the mines are decreasing, so that the activity of casting and brass-founding units is limited mainly to servicing, maintenance and repairs. No further development is to be foreseen except through modernisation of the various undertakings.

Modernisation investment: 1,500,000 DH

obs created: 0.

2) **Boiler-making, sheet-iron, structural metal**

	1963	1968
Production	9830 tons	11,500 tons
Capacity	12,000 »	14,000 »
Imports	265 »	300 »

Orders in this sector vary widely from one period to another and undertakings are constantly urged to equip themselves with a view to doing away with the bottlenecks resulting from this diversity.

Wo may except a certain rejuvenation when ancient equipment is replaced.

Investment for evolution: 2,500,000 DH

Jobs created: 0.

3) **Forging, stamping**

1963		1968	
Production	469 tons	Production	500 tons
Imports	1499 »	Imports	500 »
Imported forged hand-tools		Production capacity	6000 »
Parts for mechanical units and bolts/nuts (imported)	1050 »		

This is an important sector, the present production of which is of the handicraft type, except for the manufactures of crushing material for cement factories.

A firm set up under the scheme for reconversion of the A.I.A might hope to meet the needs of the market for parts of every kind, manufactured after a preliminary operation of forging and stamping in a metal-processing unit.

Investment: 12,000,000 DH

Jobs created: 260.

4) Internal combustion engines

	1963	1968
Production	0	1500 units
Imports	2108 units	800 »

Internal combustion engines can be used in many ways and may be fixed (pumping stations etc.) or mobile (vehicles and tractors). Various projects aim at setting up assembly chains to meet the demands of the local market, which are already considerable. The power range in normal use is wide (from 7 CV to 60 CV) and so production can only concern itself with the most usual sizes, which can ensure profitability. Special sizes will still be imported. These represent 1/3 of the market.

Investment: 600,000 DH

Jobs created: 40.

5) Manufacture of pumps

	1963	1968
Production	104 units	5000 units
Imports	6496 »	2000 »

It is desirable to develop this activity which is essential to a predominantly agricultural country. Centrifugal pumps, mechanical or pumps can be manufactured locally except for injection pumps and those which work at high pressure.

Investment: 1,500,000 DH

Jobs created: 40.

6) Manufacture of railway equipment

	1963	1968
Production and repairs	154 waggons	180 waggons
Imports	0 »	0 »

1968 production will consist of 150 waggons for the State Railways (minimum quantity for the maintenance of 6500 units) and 30 waggons for private firms.

Investment for maintenance: 1,300,000 DH

Jobs created: 0.

7) Manufacture and assembly of tractors

1963		1968	
Production	0	Production (wheeled tractors	800
Imports (wheeled tractors)	190	Production (tracked)	400
Imports (tracked)	235	Imports	50

An assembly line for tracked tractors has been approved and one or two for wheeled tractors will also be approved. These units will start up before the end of the Plan.

Normal renewal of the tractor fleet (800 wheeled and 4000 tracked) will mean increased purchases over the next few years. It is intended to produce 800 wheeled tractors and 400 tracked each year to meet the normal requirements of the country.
Investments have been estimated at: 1,500,000 DH.

Jobs created: 80.

8) Manufacture and assembly of equipment for cultivation

	1963	1968
Production	1800 tons	4000 tons
Capacity	3000 »	4500 »
Imports	1744 »	

This sector, like that of tractors, suffers from a shortage of orders considering the requirements of the country. Renewal of obsolete equipment and the improvement of new areas should enable it to achieve a rate of production more in keeping with the demands of agriculture.

To achieve this aim capacity must be stepped up:

Investment: 1,500,000 DH
Jobs created: 150.

9) Locksmithery and hardware

	1963	1968
Production	220 tons	2800 tons
Imports	840 »	800 »
Handicrafts	2200 »	2200 »
Industrial capacity	4000 »	4000 »

This sector is tied up with building and ought to develop more. It consists of dispersed undertakings which are quite small. Imported goods are mainly of high quality and represent 30% by value of the requirements of the market. A part of these imported products should be produced locally.

Investment: 200,000 DH
Jobs created: 100.

10) Manufacture of electric wire and cables

	1963	1968
Production	2340 tons	3300 tons
Imports	954 »	900 »
Capacity	3000 »	3800 »

The growth of demand for this sector is estimated for the year 1968 on the basis of known facts concerning industrial development and the building trade.

Production capacity must increase.

Investment: 1,800,000 DH
Jobs created: 40.

11) Electric motors and transformers

	1963	1968
Production — transformers	1180 thousand DH	2100 thousand DH
Production — motors	0	2250 » »
Imports — transformers	2666 thousand DH	1800 » »
Imports — motors	4255 thousand DH	2500 » »

Increased production of transformers and the creation of an electric motor industry will involve:

Investment: 2,000,000 DH
Jobs created: 50.

12) Metal packing

	1963	1968
Production	32,750 tons	38,000 tons
Imports	323 »	350 »

The canning industry is the main customer. Growth has been at the rate of 3.5% over the last few years and it will be maintained at least at the same figure.

Extensions will be needed to keep pace with development.
Investment estimated 3,000,000 DH
Jobs created: 70

Fabrication et montage de biens d'équipement

ACTIVITES : 1963

Activités	Unités	Productions	Importations	Ressources	Exportations	Consommations
Fonderie - robinetterie .	T.	4.647	2.418	7.265	54	7.211
Chaudronnerie tôlerie	T.	9.830	265	10.095	395	9.700
	M. DH	25.582	657	26.239	638	25.601
Forge - estampage ..	T.	469	1.499	1.968	—	1.968
	M. DH	613	4.053	4.666	—	4.666
Moteurs à combustion interne	U.	—	2.108	2.108	12	2.096
	M. DH	—	5.612	5.612	54	5.558
Pompes	U.	104	6.496	6.600	15	6.585
	M. DH	60	3.530	3.590	26	3.564
Matériel ferroviaire (neuf et réparé)	U.	154	—	154	—	154
	M. DH	1.278	—	1.278	—	1.278
Tracteurs agricoles	U.	—	425	425	—	425
	M. DH	—	9.757	9.757	—	9.757
Matériel de culture	T.	1.800	1.744	3.544	46	3.498
	M. DH	9.450	8.696	18.146	441	17.705
Serrurerie - ferronerie ...	T.	2.000	840	2.840	—	2.840
	M. DH	8.500	3.651	12.151	—	12.151
Câbles et fils électriques ..	T.	2.340	956	3.296	1	3.295
	M. DH	13.360	4.483	17.843	9	17.834
Emballages métalliques .	T.	32.750	323	33.073	492	32.581
	M. DH	135.179	1.364	136.543	1.207	135.336

GLOSSARY

"Robinetterie" = brass-founding
"chaudronnerie" = boiler-making
"matériel ferroviaire" = railway equipment
"serrurerie" = lock-making
"emballage" = packaging.

III. — MANUFACTURE AND ASSEMBLY OF VEHICLES

1) Construction of trucks

	1963	1968
Production	2354 units	5500 units
Imports	2893 »	500 »
Exports	130 »	

Imports almost intirely consist of trucks less than 3.9 tons. The intended assembly of utility vehicles lighter than those being turned out at present will considerably increase the activity of this sector and that of sub-contractors.

There must be about 60,000 vehicles at present, so that a demand for 6000 new trucks is not excessive for 1968 and is equivalent to a rate of growth of 5%.

Investment: 4,000,000 DH
Jobs created: 130.

2) Construction of cars

	1963	1968
Production	6726 units	11,000 units
Imports	3651 »	1000 »

This sector, which had a rectricted rate of activity in 1962, is now turning over satisfactorily.

Installation of new machinery will involve:

Investment: 5,000,000 DH
Jobs created: 70.

3) Motorcycles, scooters etc.

	1963	1968
Production	20,251 units	38,000 units
Imports	11,687 »	9000 »

This is a new industry. but by reason of its quality it has achieved an interesting rate of production. We may still except developments owing to the interest of consumers in this type of vehicle.

Investment: 1,500,000 DH
Jobs created: 80.

4) Bicycles

The activity of this sector is rather of the handicraft type. However, the production of spare parts (frames, saddles, handle-bars etc) is moving ahead in Morocco, so that the local added value per cycle is rising at the same time as total production.

5) Miscellaneous activities

	1963	1968
Overland vehicles production	364 units	400 units
Trailers etc. production	327 »	450 »
Imports	199 »	150 »

Coachwork

This is tied up with the production of trucks and the percentage of local value is considerable.

No investment of importance.

Fabrication et montage de véhicules

Activités 1963 :

Activités	Unités	Productions	Importations	Ressources	Exportations	Consommations
Camions	U.	2.354	2.893	5.247	130	5.117
	M. DH	62.804	22.045	84.849	3.340	81.509
Voitures tourisme ...	U.	6.276	3.651	9.927	—	9.927
	M. DH	58.500	31.126	89.626	—	89.626
Motocycles ..	U.	20.251	11.687	31.938	—	31.938
	M. DH	10.075	5.255	15.330	—	15.330
Cycles	U.	19.970	621	20.591	—	20.591
	M. DH	2.015	85	2.100	—	2.100
Véhicules tous terrains (jeeps)	U.	364	—	364	—	364
	M. DH	4.949	—	4.949	—	4.949
Bennes et remorques ..	U.	327	199	526	—	526
	M. DH	3.637	882	4.519	—	4.519

GLOSSARY

"Camions" = trucks

"Voitures tourisme" = touring cars

"Bennes et remorques" = trailers

IV. — MANUFACTURE AND ASSEMBLY OF GOODS FOR THE CONSUMER MARKET

1) Refrigerators

	1963	1968
Production	1000 units	9500 units
Imports	9378 »	500 »

1962

Production 1473 units.

A plant for assembly and manufacture of refrigerators started up in 1962. The market, which amounts to about 10,000 units, may allow for considerable development.

Investment: 800,000 DH
Jobs created: 40.

2) Sewing and knitting machines

	1963	1968
Production	0	17,000 units
Imports	18,181 units	2700 »

The market is expanding. Between 1958 and 1962 sales increased by more than 30%. In 1963 they increased again by 50%. A firm is to be set up to supply sewing machines.

Investment: 1,200,000 DH
Jobs created: 40.

3) Domestic articles

	1963	1968
Production	1528 tons	1200 tons
Imports	607 »	700 »

The development of demand is linked to the growth of domestic consumption. These mass-produced articles have good prospects and the sector is being developped and equipped accordingly. Recent investments have been made, especially in respect of aluminium articles and present capacity will allow for expansion.

Investment: 2,000,000 DH
Jobs created: 100

4) Metal furniture

	1963	1968
Production	1098 tons	1200 tons
Imports	482 »	500 »

This sector turns out metal furniture for offices, bedsteads, other furniture and chairs

Imports consist mainly of surgical equipment.

Maintenance investment: 150,000 DH

Jobs created: 25.

5) Heating and lighting appliances

	1963	1968
Production	163 tons	800 tons
Imports	1544 »	1100 »

Imports (nearly 9 million DH) might be reduced by an extension of production units (which are still insignificant), since most of the machinery required exists and prospects are good.

Estimated investment: 1,350,000 DH

Jobs created: 30

6) Radio-Television

	1963	1968
Radio production	1000	90,000
TV »	3600	12,000
Radio imports	94,598	
TV »	4657	

In 1963 the volume of imports was almost double the average for previous years as regards radio and the beginning of TV production. New radio operations may stimulate this sector.

Estimated investment: 2,270,000 DH

Jobs created: 400

7) Electrical domestic appliances

Production	103 tons	250 tons
Imports	213 »	100 »

With a hitherto modest activity this sector is likely to develop during the next few years. If production is encouraged it might well develop on the right lines.

No investment.

8) **Batteries and accumulators**

	1963	1968
Production of batteries	295,000 units	310,000 units
Import batteries	192,000 »	190,000 »
Production accumulators	1097 »	1300 »
Import accumulators	393 »	350 »

The production of accumulators has been stimulated by the existence of assembly chains, which means we can estimate the number of batteries needed in 1968 at 85,000 (new vehicles and replacements).

⁂

Fabrication et montage de biens de consommation

Activités 1963 :

Activités	Unités	Productions	Importations	Ressources	Exportations	Consommations
Appareils frigorifiques .	U.	0	9.378	9.378	—	9.378
	M. DH	0	5.007	5.007	—	5.007
Machines à coudre et à tricoter	U.	0	18.181	18.181	0	18.181
	M. DH	0	5.403	5.403	0	5.403
Articles de ménage	T.	1.528	607	2.135	502	1.633
	M. DH	13.245	3.874	17.119	2.154	14.965
Mobilier métallique ..	T.	1.098	482	1.580	184	1.396
	M. DH	6.275	1.211	7.486	673	6.813
Chauffage éclairage ...	T.	163	1.544	1.707	—	1.707
	M. DH	1.545	8.694	10.239	—	10.239
Radio-télévision R	U.	1.000	94.598	95.598	—	95.598
	M. DH	175	9.792	9.967	—	9.967
id. T.V.	U.	3.600	4.657	8.257	—	8.257
	M. DH	3.105	3.020	6.125	—	6.125
Appareils électro-ménagers ...	T.	103	213	316	—	316
	M. DH	742	1.432	2.174	—	2.174
Piles et accus P.	U.	295.000	192.000	487.000	—	487.000
	M. DH	2.295	1.495	3.790	—	3.790
id. A.	T.	1.097	393	1.490	—	1.490
	M. DH	3.641	1.733	5.374	—	5.374

GLOSSARY

"App. frigorifiques" = refrigerators

"machines à coudre" = sewing machines

"mobilier métall." = metal furniture

"chauffage, éclairage" = heating and lighting

"appareils électro-ménagers" = electric household appliances

"piles et accus" = batteries and accumulators.

SECTION I

The basic chemical industry

I. — SAFI CHEMICAL COMPLEX

A) The Complex proper

Definition

A plant to produce fertilizer from pyrrhotine and phosphate extracted from Moroccan soil.

500,000 tons of pyrrhotine and 580,000 tons of phosphate rock are treated each year to obtain 200,000 tons of TSP and 150,000 tons of DAP, mainly for export.

According to the evolution of the market it will be possible to produce DAP only at the rate of 300,000 tons a year, or only TSP at a rate of 400,000 tons a year.

The acids used and the pyrrhotine cinders will serve other purposes which are being studied.

Economic advantage

Apart from ammonia, which will initially be imported, raw materials are Moroccan. After deducting the ammonia and amortization of foreign material the turnover represents a gain in currency. With 140-150 million DH of sales per year, more than 100 million DH of foreign exchange will be brought in.

The 500 persons employed is nothing to the employment created by pyrrhotine extraction, transport, the fact that 400,000 extra tons will pass through Safi port etc.

The State will gain considerably in the form of taxes and duty.

The Safi Chemical Complex went into production in June 1965.

Finance

Total investment on completion of the work amounts to 215 million DH of which 114 million was paid up at the end of 1964.

As regards the remaining 101 million, payments for 1965 total 82.400.000 plus 18.600.000 in 1966.

So far financing has almost all been handled by the State. A plan calling for foreign investment is being studied.

B) Ancillary production

a) Sodium tripolyphosphate

1. — Main objective

Production of the above material, which is a base for making detergents, from excess phosphoric acid produced by the Complex.

2. — Essential characteristics

2-1. — Supplies and labour

— Phosphoric acid	6300 tons
— Carbonate of soda	8100 »
— Utilities	
— Installed power	800 KW
— Electric power	600 000 KWH
— Fuel-oil	1800 tons
— Sea water	100 m3/hr.
— Labour	

2-2. — Production capacity

Total production during the first phase is 10,000 tons/yr. of which 300 tons are for the local market and 7000 for export.

2-3. — Investments

These, plus working capital, amount to 8,300,000 DH of which 3 million is registered capital, the remainder being covered by loans and supplier credit.

2-4. — Location

Near the Complex, which supplies the phosphoric acid. The unit will have the benefit of the existing substructure and general services.

3. — State of progress

Technical and economic survey in process of completion.

4. — Advantages - conclusions

Satellite activity round the Complex will help the industrial development of the country.

At the first stage the gain in currency will be 2.5 million DH, but in view of the likely extension of the market and the existence of this source the figure may later be considerable.

b) Treatment of pyrrhotine cinders

1. — Main objective

At the complex, after roasting pyrrhotine to make sulphuric acid, we obtain a residue in the form of cinders, which will amount to 400,000 tons a year working at full capacity.

These cinders contain 60.4% iron, 0.8% copper and 1.4% sulphur, but they are unsaleable in this form since they have a too high copper content.

By removing the copper it is possible to use the cinders to advantage.

2. — Essential characteristics

Preliminary studies and tests have served to determine the choice of a process for decopperizing and desulphurizing the cinders.

Since this process is only at the pilot stage at present (1000 tons/yr. we propose during the first phase a minimum industrial unit producing 100,000 tons/yr. which would later be integrated in a 500,000-ton factory, the figure 500,000 taking into account cinders stored while the process is being perfected.

Investment for a 100,000-ton plant might come to 18 million DH.

For a 500 000-ton capacity extra investment would be about 40 million but would not come under the present Plan.

The increase to 500,000 tons would increase profitability.

The location is bound to be Safi.

3. — State of progress

The promoter of the process has successfully carried out tests at pilot level (3tons per day). The process consists of treating the cinders with gaseous chlorine to obtain copper and an iron in the form of pellets which have considerable commercial value.

4. — Advantage of the project

Use of an available raw material which cannot otherwise be marketed.

At the same time studies are being carried out on the treatment of iron ore pellets by direct production for the production of sponge iron.

It will probably be necessary to count on State participation which can be estimated at a maximum of 5 million DH, i.e 3 million in 1965 and 2 million in 1966.

a) Ammonia, Naphta, Bitumen

Two projects are afoot :

— One project is for production of bitumen at Tangier. It is associated with a project for a fuelling station for ships also at Tangier.

— Another project, studied within the framework of the Safi complex is for the production of three complementary materials. The details of this project are as follows :

1. — Main objective

DAP production at the Complex will require 35,000 tons/yr. of ammonia imported at a high price.

Moreover, the creation of a 40,000-ton bitumen unit is contemplated and is essential to the needs of the country.

By the new steam reforming process it is possible to produce ammonia at a cost price below that of any imported material, in view of the cost of sea freight and storage at Safi, which represents more than 30 % of the price of the product in exporting countries.

These two lines have been integrated in a single project which would essentially comprise :

— A refining unit which would treat various petroleum products (light and asphaltic) by which we can obtain bitumen, naphta for production of ammonia and different fuels for the Complex.

— A unit for synthesis of ammonia using the naphta produced in the first unit as a raw material.

2. — Essential characteristics

— 2.-1. — Supplies and labour

Raw materials

— 55,000 asphaltic crude
— 75,000 light crude

Utilities

— Electric power	6 000 KW
— Consumed power	40,000,000 KWH

The price per KWH sold by the Complex is 0.06 DH.

— Fresh water	50 m³h
— Sea water	1500m³h

Labour : 150.

2.-2. — Production capacity

— Bitumen	40,000 tons
— Ammonia	50,000 »
— Miscellaneous	45,000 »

2.-3. — Investment

	Bitumen	Amonia	Integrated unit
1. Pipe-line and stock	7,000,000 DH	1,600,000 DH	8,000,000 DH
2. Battery limits unit.	5,000,000 »	17,400,000 »	22,400,000 »
3. Connections	1,000,000 »	1,000,000 »	2,000,000 »
4. Spares	300,000 »	1,250,000 »	1,550,000 »
5. Training	—	2,50,000 »	250,000 »
6. Start-up costs	300,000 »	1,000,000 »	1,300,000 »
7. Interest during erection (1+2+3+4+5+6)	800,000 »	1,400,000 »	2,200,000 »
8. Contingencies	600,000 »	1,100,000 »	1,700,000 »
	15,000,000 DH	25,000,000 »	40,000,000 »
9. Working capital			5,000,000 »
		TOTAL . .	45,000,000 »

2.-4. — Location

Near the Safi Complex (biggest customer). Transport and storage of ammonia will thus be no problem.

3. — State of progress

Technical, economic and financing survey completed.

4. — Advantage of the project

The plant will save foreign currency and will employ 125-130 people. The main advantage lies in the fact that the Safi Complex will find locally all the raw materials it needs. The plant will produce ammonia at a price below the world price and must be erected near the Complex.

However this ammonia production cannot take place without State aid in so far as it is linked up with the production of bitumen in an integrated plant.

II. — CHLORINE, SODA AND DERIVATIVES

1. — A vast complex for the chlorine and electrolytic soda industry is proposed inside the Sidi Yahia plant which already produces " Moroccan Cellulose " as a basic product.

The extension of existing facilities is in fact more rational and less expensive than the creation of a new industry from scratch as was suggested hitherto.

This "national production unit " would also be in a better position to tackle the problems which hinder the economic union of the Maghreb. The cost price of production will be lower than that of separate units. The methods of intervention in any field connected with the chemistry of chlorine-soda will in fact be more powerful and efficient.

2. — As a first approach the production programme is as follows :

Type of product	Present production (tons per day)	Forecasts (tons per day)	(tons per year)
Chlorine	6.5	19 (1)	6600
Soda	7.2	21 (1)	7000
Hydrochloric acid 33 %	0	3	1000
PVC	0	30	10,000

As regards PVC the solution adopted is the import of monomer and the setting up of a polymerisation unit.

This project will be able to offer PVC for consumption at competitive prices without penalising national user industry (partly exporters) or raising internal prices.

3. — **Investment** (in thousands of DH)

— Chlorine-soda unit :	
— up to 11 tons a day	1920
— from 11 to 19 tons a day of chlorine	3200
— Hydrolic acid unit	150
— Polymetric PVC unit	5500
	10,770
— with contingencies	11,000

---

(1) So as to meet the needs of the alfa plant with a 30,000 ton/yr. capacity.

The following finished products will be sold on the market :

— Chlorine	5 500	tons/yr.
— Soda (either in solution or solid)	12,600	»
— Calcium carbide	8 000	»
— PVC	7 500	»

These tonnages correspond to the capacities envisaged for the local market

2.-3. — **Investment**

a) Chemical units	35,500,000 DH
b) Power units	4,920,000 DH
c) Ancillary services and general facilities	7,200,000 DH
Total cost	47,620,000 DH
Working capital	5,250,000 DH
Capital required	52,870,000 DH

Location

Meknes.

3. — **State of progress**

Technical and economic survey completed.

4. — **Advantage of project - Conclusions**

Important gain in currency = about 20 million DH.

This is because the whole of production will be for the home market replacing imports. Essential raw materials are local.

Increase of industrial potential by the manufacture of new basic chemical products (chlorine, soda).

Creation of 500 jobs without counting ancillary activity (quarries, mines, transport etc.)

III. — ALFA PULP PROJECT

Moroccan production of alfa (esparto grass) has been diminishing since 1957 owing to difficulties encountered in marketing the material. In 1964 production was only 70,000 tons whereas Moroccan potential exceeds 150,000 tons a year.

In order to make the most ofthe alfa plant it was decided to study the setting-up in esastern Morocco of an alfa-pulp plant with a capacity of 30,000 tons per year. This capacity depends on the supply to the plant of green alfa (90,000 tons) and also on the limited possibilities of the world market.

In view of the very large requirements for water in the plant (1200 to 1300 m^3/h.) Guercif has been selected as the plant's location, on the banks of the Moulouya and Melliulou rivers. This is an important centre for gathering and shipping of the dry plant. Moreover, Guercif is on the Fez-Oujda railway line and is connected to a 150,000 V grid.

Total investment is estimated at 55-60 million DH, of which 10 million is for working capital. Turnover has been estimated at about 30 million a year.

Preliminary studies may be considered at an end. These mainly concerned the conditions for supply of alfa, the choice of a site and an initial estimate of investment and working costs.

Before going any further, which would require the services of specialised firms, a search was made for partners likely to bear a fraction of the expense of final studies and to assist in the work.

Among numerous solutions negotiated, four ways seem to stand open. Two of them concern constructors of equipment who propose subjecting their supplies to interesting financial conditions. Two again concern financial groups prepared to take up an important participation in a company to be formed with this end in view. Negociations with the latter are sufficiently advanced to enable us to expect the formation of this company to take place very shortly. This does not preclude further negociations with suppliers.

In this way a large proportion of the necessary resources could be obtained in the form of supplier credit and participation.

The advantages of the project are numerous. Apart from making use of Moroccan raw materials and a considerable gain in currency, the plant would provide directly 2200 jobs in a particularly backward area and would contribute to the development of eastern Morocco.

SECTION II

Various chemical and parachemical industries

I. — Rubber

1) Tyres and inner tubes

1963

a) Production :

— car and truck tyres
189,600 units
26,030,000 DH

— Car and truck tubes :
146,100 U
4,030,000 DH

b) Imports :

— car and truck tyres
76,000 U

— Car and truck tubes :
24,000 U

— Cycle tyres :
821,000 U

— Value of imports :
512,000 U

— Value of imports :
7,560,000 DH

1968

a) Production :

— car and truck tyres
320,000 units

— Car and truck tubes :
230,000 U

— Cycles tyres ;
300,000 U

b) Imports :

— car and truck tyres
75,000 U

— Car and truck tubes :
25,000 U

— Cycles tyres ;
900,000 U

— Cycles tubes :
600,000 U

New investments will enable this sector to meet most of the country's requirements in the usual sizes.

— Estimated investments : 1,000,000 DH

— Jobs created : 100.

2) Manufactured rubber industry

1963		1968	
Production .	8,779,000 DH	Production .	12,800,000 DH
Imports	8,573,000 DH	Imports ...	6,600,000 DH

This sector produces a wide range of articles for which the damend is variable ·

- — Tubes and pipes. Demand decreasing owing to demand for plastics.
- — Driving belts and conveyor belts. All requirements.
- — Footwear. Decreasing since 1962.
- — Other products. Normal development. Stimulated by the needs of assembly lines.

Estimated investment :	Belts :	6,300,000 DH
	Other :	700,000 DH

Jobs created : Belts : 120, other : 80.

II. — PLASTICS

1963		1968	
Production	7110 T.	Production	9500 T
Imports	2017 T	Imports	1500 T

This sector has acquired a great importance, as was to be expected. In 1964 production represented more thon 50 million DH.

If new investments are made by industrialist due to the evolution of techniques, they will at the same time have to reconvert some of their installations.

Investments : 3,00,000 DH.

Jobs created : 50.

MISCELLANEOUS CHEMICAL AND PARACHEMICAL INDUSTRIES

ACTIVITY IN 1963

Activity	Unit	Productions	Imports	Resources	Exports	Consumption
Car and truck tyres	M.U.	189	76	265	—	265
Car and truck tubes	M.U.	146	24	170	—	170
Cycle tyres ..	M.U.	0	821	821	—	821
Cycle tubes ..	M.U.	0	512	512	—	512
Manufactured rubber	M. DH	8.779	8.573	17.352	145	17.207
Plastics	M. DH	47.300	10.286	57.586	1.174	56.412

III. — CHEMICAL AND PARACHEMICAL INDUSTRIES

1) Washing and cleaning products

1963		1968	
Production	12,857 T	Production	15,000 T
Imports	1235 T	Imports	800 T

Imports are no more than a third of what they were in 1958, which emphasises the development of this line of products.

Part of this sector is often a conditioning activity. Nevertheless the major part consists of the production of detergents and "eau de Javel" which is exclusively at industrial level. Firms can meet an increased demand.

Extension investment : 800,000 DH.
Jobs created : 35.

2) Paint and varnish

1963		1968	
Production	7039 T	Production	8080 T
Imports	1087 T	Imports	1000 T

This industry has made rapid progress since 1958 and its equipment will enable it to meet increased demand.

An extension of the possibilities of the principal firms is to be expected. This arises mainly from the diversification of products.

Investment : 2,300,000 DH.

Jobs created : 60.

3) **Insecticides and fungicides**

1963		1968	
Production	1446 T	Production	4000 T
Imports	4432 T	Imports	3000 T

It is necessary to increase the production of this sector which is a quite recent development. Demand is expected to rise by 7-8 %.

Investment : 1 000,000 DH.

Jobs created : 40.

4) **Essential oils**

1963		1968	
Production	7,183,000 DH	Production	10,000,000 DH

Almost the whole of local production is exported, but the tightness of the world market and the competition from synthetic products have considerably reduced the manufacture of some essences.

Existing facilities are able to meet normal estimates of demand.
Mobile treatment units have been proposed, the cost of which would be 300,000 DH.

Jobs created : 17 (production).
200 (gathering the crop - seasonal).

5) **Perfumery**

1963		1968	
Production	6,900,000 DH	Production	18,800,000 DH
Imports	4,428,000 DH	Imports	2,000,000 DH

Imports are declining steadily (7,000,000 DH in 1962) and local production is developing strongly.

The manufacture of health and beauty products, which is usually a side-line of the soap industry, detergents, and pharmaceutical products, will continue to develop in opposition to imports.

Existing industries are capable of meeting demand and their investments are integrated among the objectives of their principal activities.

As regards liquid perfumes expansion of demand will be followed and local manufacture may ensue, integrated with the treatment of essential oils.

Investment : 150,000 DH.

Jobs created : 50.

6) **Soap**

1963		1968	
Production	25,517 T	Production	30,000 T
Imports	182 T	Imports	150 T
Capacity	35,000 T		

1968 production has been estimated bearing in mind the study of domestic consumption, but also the competition from synthetic detergents.

No investment is provided for, although renewal of some equipment and a possible diversification may cost about 1,000,000 DH.

Jobs created : 50.

7) **Stearin production**

1963		1968	
Production	4557 T	Production	4500 T
Imports	12 T	Imports	10 T
Exports	396 T	Exports	400 T

This sector is affected by the growth of electrification, which outwieghs the increase of population.

Production capacity is 10,000 tons. No investment.

8) **Pharmaceutical products**

1963		1963	
Production .	9,729,000 DH	Production .	40,000,000 DH
Imports ..	59,752,000 DH	Imports ..	39,000,000 DH
Exports ..	1,633,000 DH	Exports ..	2,000,000 DH

Moroccan industry manufactures and conditions drugs under foreign licence. The local added-value for imported raw materials is about 30 %.

New industrial laboratories are being established which will considerably improve the foreign exchange situation in view of the production involved

Investment : 4,600,000 DH.

Jobs created : 200.

9) **Matches**

1963		1968	
Production .	13,665,000 DH	Production .	15,200,000 DH

Three factories cover the needs of the country, which have been rising regularly by 5 % since 1960. They are only working at 80 % of their capacity and extensions are to be made in view of the low margin for production.

Investments : 800,000 DH.

Jobs created : 10.

10) **Agar-agar - alginates**

1963		1968	
Production	518 T	Production	550 T
Exports	516 T	Exports	545 T
Imports	15 T	Imports	16 T

Imports indicate more elaborate products.

Investments were effected in 1962 and 1963.

Activités	Unités	Productions	Importations	Ressources	Exportations	Consommations
Lessives et produits d'entretien .	T.	12.857	1.235	14.092	7	14.085
	M. DH	19.311	2.522	21.833	33	21.800
Peintures et vernis	T.	7.039	1.087	8.126	155	7.971
	M. DH	15.534	5.801	21.335	315	21.020
Insecticides - fongicides ..	T.	1.446	4.432	5.878	31	5.847
	M. DH	3.629	5.546	9.175	154	9.021
Huiles essentielles	M. DH	7.183	631	7.814	6.314	1.500
Parfumerie ..	M. DH	6.900	4.428	11.328	—	11.328
Savonnerie ...	T.	25.417	182	25.599	18	25.581
	M. DH	36.788	506	37.294	24	37.270
Stéarinerie ...	T.	4.557	12	4.569	396	4.173
	M. DH	7.219	58	7.277	54	7.223
Produits pharmaceutiques .	M. DH	9.729	59.752	69.481	1.633	67.848
Allumettes ...	M. DH	13.665	—	13.665	—	13.665
Alginates-agar-agar ...	T.	518	15	533	516	17
	M. DH	5.913	45	5.958	6.039	—

CHEMICAL AND PARACHEMICAL INDUSTRIES

GLOSSARY

"Lessives" = lyes

"Peintures et vernis" = paint and varnish

"Huiles essentielles" = essential oils

"Savonnerie" = soap manufacture

"Stéarinerie" = tallow factory

"Allumettes" = matches.

IV. — OTHER CHEMICAL INDUSTRIES

1. — Compressed and dissolved gas

(not including peteoleum products)

Production

	1963	1968
Oxygene	1,200,000 m^3	1.500,000 m^3
Acetylene	257,000 m^3	320,000 m^3
Carbon gas	414,000 kg	520,000 kg
Imports :		
Argon	655 kg	1000 kg

Oxygen, acetylene and argon are used for welding metals. The consumption of carbon gas is linked with the manufacture of effervescent drinks.

The production capacity of the three existing factories, which only worked to 50% in 1963, is such that no investment is contemplated.

2. — Organic synthesis

The organic matter in synthesis, such as colouring matter, cellulose, synthesic rubber etc., is being developed very rapidly and saturation point has not yet been reached on the market. In 1963 the imports for the whole of the sector reached 30,000,000 DH and, among these, only the consumption of PVC allows us to plan a special plant. The other very diverse products do not at present call for the construction of new plants. Nevertheless the evolution of techniques may modify this situation if some products make themselves felt and cause a concentration of needs.

3. — Treatment of household waste

	1963	1968
Probable production	450 tons/day	1350 tons/day.

Treatment of refuse eliminates harmful elements and recovers those which are usable as complex fertilizer and are sold near the towns where they are produced.

The experiment at Rabat-Salé is being continued in Rabat, Meknes, Tetuan, Marrakesh and probably Tangier, Safi, Oujda, Fez and Casablanca will be equipped before the end of the Plan.

Estimated investment: 3,240,000 DH

Jobs created: 150.

4. — Vitamins

	1963	1968
Exports	523,420 DH	625,000 DH
Imports	294,000 DH	360,000 DH

Morocco imports all sorts of vitamins and also consumes part of the vitamins produced locally.

Some are extracted from citrus fruit and others come from treatment of the vegetable or animal matter in which they are contained.

It has been proposed to extract furfurol from olive skins (objective 1200 tons) and nucleic acid from tunny-fish (objective 1000 tons).

Probable investment: 2,800,000 DH

Jobs created: 20.

II. – Industrial sectors

CHAPTER III

THE FOOD INDUSTRY

SECTION I

Sugar and derivatives

I. — SUGAR-WORKS - REFINERIES

The overall demand for sugar in Morocco rose in 1963 to 378,843 tons:

Loaf sugar	314,295 tons
Granulated sugar	54,280 tons
Lump sugar	10,268 tons

The evolution of demand was studied on the basis of a survey of domestic consumption corrected by the figures for actual consumption, bearing in mind the demand in 1963 and 1964.

In 1968 overall consumption may reach about 408,000 tons in the following categories:

Loaf sugar	364,000 tons
Granulated sugar	50,000 tons
Lump sugar	12,000 tons.

The production of Moroccan refineries in 1963 was as follows (SUNAB not included):

Loaf sugar	240,718 tons
Lump sugar	9639 tons
Granulated sugar	53,165 tons
	303,522 tons.

To satisfy demand it was necessary in 1963 to import about 75,000 tons of loaf sugar.

Production capacity of the Moroccan refineries in 1963 was:

Loaf sugar	245,000 tons
Granulated sugar	100,000 tons
Lump sugar	20,000 tons

Investments effected in 1964 increased the production capacity of the refineries as regards loaf sugar. On the other hand the establishment of SUNAB producing granulated sugar from beet made it necessary to limit production of granulated sugar by the refineries made from imported red sugar.

Under these conditions the production capacities to consider in 1965 are:

Loaf sugar	265,000 tons
Granulated sugar	50,000 tons
Lump sugar	20,000 tons.

Finally, the sugar-mill at Tadla, which is due to go into operation in 1966, will reach, in 1968, its nominal capacity of 37,000 tons of loaf sugar per year.

Sugar policy and industrial investment

The success of the beet-growing campaign in the Gharb means that Morocco can produce an important fraction of its sugar requirements. The initial results of the Sidi Slimane sugar-mill and the forecasts regarding the Tadla plant allows us to suppose that this production will — apart from considerable savings in currency — involve major economic activity and will be a long-term asset for the Treasury.

In short the implementation of a widespread sugar policy will mean a real switch in the agricultural economy of the country and hence of Moroccan economy as a whole.

For this reason, taking into account the possible evolution of present demand and potential, it has been decided to create two new sugar-mills with a nominal capacity of 38-40,000 tons/yr. each.

The first, equipped with a unit for the production of loaf sugar, will be installed in the Gharb and it is due to go into operation in 1967. Loaf sugar capacity will rise to 75,000 tons in the second stage in order to follow subsequent evolution of demand. With the Tadla refinery, which is to be extended later, it will be one of the chief foundations of the Moroccan sugar-beet industry.

The second sugar-mill, also to be set up in the Gharb area, is to go into operation in 1968 and its production (38,000 tons of granulated per year) will be turned into loaf sugar in the previous plant or in the Casablanca refineries. It will this be the third foundation of the industry.

The mill intended to produce granulated sugar will cost about 68 million DH, including:

Imported equipment	38	million DH
Buildings, erection	22	»
Equipment purchased in Morocco	14	»

The mill producing loaf sugar will cost about 86 million DH, including:

Imported equipment	38 million DH
Building erection	29 »
Equipment purchased in Morocco	19 »

Each plant will mean the creation of about 450 permanent jobs about 200 seasonal jobs.

Sugar production in 1968 will be accompanied by the production of 35,000 tons of molasses, mainly intended for export.

II. — **YEAST**

In 1963 Moroccan consumption was 4326 tons of fresh yeast and 504 tons of dry. Production is now 3421 tons. Imports amount to 895 tons of fresh and 504 tons of dry.

Investment:

— The existing factory will bring its annual production up to 10,000 tons of fresh and 700 tons of dry during the Plan period.

— Investments will amount to about 95 million DH.

— A new yeast factory should be provided for is order to produce dry yeast from sugar-mill molasses.

This new plant with a production capacity of 1200 tons of dry yeast will have an effective production in 1968 of 950 tons (80% of nominal capacity). Production will necessitate the utilisation of 2850 tons of fresh yeast obtained from 5000 tons of molasses. It will have to be located near a sugar-beet plant (Gharb or Tadla) in order to facilitate the utilisation of molasses from the latter.

Investments will amount to 2.6 million DH and the necessary working capital will be 900,000 DH. About 50 jobs will be created. The value of production will be 3,600,000 DH in 1968.

III. — **CONFECTIONERY - CHOCOLATE**

The size of the handicraft industry here is such that we cannot precisely estimate the production of this sector. Industrial production (confectionery without cocoa) rose to 5000 tons in 1963. Imports were 134 tons and exports 120 tons.

For 1968 we may expect an industrial production of 6000 tons, 1000 tons of which will be exported.

The production capacity of the factories is about 8000 tons per year. Thus there will be no extension but only expenditure on modernisation to allow for an increase in exports and improvement of marketing.

These investments in equipment may amount to 1 million DH. About 35 jobs will be created. The turnover will be 160,000 DH.

2) **Chocolate**

In 1963 production was 900 tons of powdered chocolate and 175 tons of cocoa-based confectionery.

Imports were 115 tons in 1963 and exports 78.5 tons, total consumption being 1112 tons.

Taking into account the reduction the foreign population and increased consumption by Moroccans, demand may stabilise at about 1100 tons.

Investments already made will be sufficient to meet this demand.

SECTION II

Fatty substances of vegetable origin

I. — PRESENT SITUATION AND OUTLOOK FOR THE FUTURE

1) Edible vegetable oils

The balance-sheet of resources and employment with regard to the various types of oils has been estimated as follows for 1963:

	Oils from refined seeds	Refined olive-oil for refineries	Crude and refined olive-oil (1)	Argan oil	Totals
Production (2) ...	63.727	1.543	29.030	5.000	99.300
Imports (3)	1.597	—	—	—	1.597
Total resources	65.324	1.543	29.030	5.000	100.897
Domestic consumption	61.180	—	18.570	5.000	84.750
Industrial	4.144	1.543	1.680	—	7.367
Exports	—	—	8.780	—	8.780
Total	65.324	1.543	29.030	5.000	100.897

---

(1) Expressed as crude oils.

(2) In the case of seed-oil only production for local consumption and canning are included. Exports are not mentioned.

(3) Exceptional imports.

Domestic consumption rose in 1963 by 84,750 tons. On the basic assumptions of the Plan and taking into account the different consumption of urban Moroccans, rural Moroccans and foreigners, we may expect total consumption in 1968 to be 98,500.

A study of the evolution of demand since 1958 enables us to set the following objectives for domestic consumption.

Domestic consumption:

	1963	1968
Seed-oil	61,180	71,000
Olive-oil	18,570	22,500
Argan oil	5000	5000
Total	84,750	98,500

At the same time the need for refined oil for canneries will amount to 11,000 tons in 1968, including 6000 tons of seed-oil and 5000 tons of olive-oil.

The outlook for overseas trade has been determined on the basis of the retention of the embargo on import of refined oils. Exports of olive-oil may be maintained in so far as the stability of production is accompanied by a reduction of internal demand for this product and the evolution of the world market permit.

The balance-sheet for resources and utilisation of edible oils is as follows:

	Refined seed-oil	Crude and refined olive-oil expressed as crude equivalent	Argan oil	Total
Production	77.000	29.000	5.000	111.000
Imports	—	—	—	—
Total resources..	77.000	29.000	5.000	111.000
Domestic consumption ..	71.000	22.500	5.000	98.500
Industrial	6.000	5.450	—	11.450
Exports	indication	1.050	—	1.050
Total	77.000	29.000	5.000	111.000

2) Vegetable oils for industrial use

Linseed-oil:

Demand was 1200 tons in 1963. An increase of 14% may be expected between now and 1968 in the demand for paint and varnish. Thus demand for linseed-oil may reach 1390 tons in 1968, necessitating the use of 3800 tons of seeds.

Solid oils:

In 1963 the demand was 2850, all imported.

The demand in 1968 is estimated at 3350 tons which may involve the trituration of 7500 tons of seeds.

II. — REORGANISATION OF THE FATTY SUBSTANCES SECTOR

In accordance with the reorganisation of some branches of industry, it seems essential to set up a new system for fatty sustances in particular.

With this end in view legislation has been introduced regulating trituration, the extraction of oil-seeds and the refining of edible oils.

This will involve:

— The removal of quotas and dues

— A re-examination of the permits granted hitherto

— The admission of new Moroccan refiners under a regional decentralisation policy.

Independently of these measures the following objectives have been established for the trituration of oil-seeds:

Trituration of oil-seeds

Out of 67,000 tons of crude treated by Moroccan refineries in 1963 only 8700 tons came from the Casablanca trituration plant, the remainder being imported.

In 1968 the production of 77,000 tons of refined seed-oil will need 81,000 tons of crude.

The minimum objective is not to increase imports of oil and oil-seeds but to maintain them at 1963 level. Morocco must therefore produce an extra quantity of seeds able to supply 14,000 tons of crude oil (81,000 — 67,000 = 14,000 tons).

This production corresponds roughly to:

25,000	tons	of sun-flower seeds (40%)
15,000	»	of cotton-seeds (22%)
3000	»	of safflower-seeds (30%)

that is to say 43,000 tons of seeds to be found in agricultural perimeters.

The Casablanca plant, which treated 32,700 tons of seeds in 1963, has a trituration capacity of about 50,000 tons of seeds. Oil requirements in 1968 will mean that Morocco must treat at least 83,700 tons of edible oil-seeds and industrial seeds (43,000 + 32,700 + 500 + 7500). The deficit in the trituration capacity is thus 33,700 tons.

The plants which have been closed since 1952, since they were obsolete and of small economic importance, do not merit their re-establishment. A second plant should be set up with a trituration capacity of 40,000 tons a year. It might go into operation in 1966 and the two plants would operate at 93% of their capacity in 1968.

The creation of this second plant would mean a total investment of 1 million DH and a working capital of 4,800,000 DH. Preferably located in the Gharb, the plant would have a trituration capacity of 40,000 tons of seeds and would create 150 jobs.

Ordered in 1965 and erected in 1966 the plant would treat in 1967 37,000 tons of seeds (sunflower, cotton and safflower) and would have a turnover of about 23,000,000 DH.

In order to follow the evolution of demand and restrict imports of crude oil, a third plant might also be contemplated if the agricultural policy as regards oil-seeds ensured supply. Its trituration capacity would be similar to the other and it should go into operation in 1968, but surveys and orders would have to come under the Plan.

SECTION III

The canning industry

I. — FISH CANNING

The internal market is difficult to evaluate (about 150,000 cases of sardines and 1000 cases o tunny). Although internal demand in this sector may increase, activity will still be linked to the world market. Moroccan exports are channelled, to the extent of more than 50%, towards the Common Market and especially France, where Morocco has a duty-free quota of 12,000 tons.

The evolution of these exports are therefore dependent on the build-up of the Common Market (adoption of common external tariffs) on Portuguese competition and the dynamism of the trade.

Production of canneries during the calendar year 1962 was:
Canned sardines: 2,100,000 cases (1/4 club 30) representing about 37,000 tons
Mackerel: 4820 tons
Tunny: 6225 tons.

This makes a total of 48,000 tons with an overall value of 133.85 million DH. The value of exports was 125.25 million DH.

Production capacity of the canneries may be estimated at about 4 million cases for sardines and 20,000 tons for tunny and mackerel.

In 1968 marketed production should be:
— 3,000,000 cases of sardines
— 100,000 cases of skinned and boned sardines (S.P.S.A)
— 10,000 tons of tunny
— 700 tons of mackerel.

Investment required (apart from renewal of equipment) are as follows:

— Production of sardines skinned and boned in existing plants at Safi: an overall investment of about 1,800,000 DH (1,200,000 for equipment and 600,000 for improvement of premises).

— Equipment of units for tunny canning (extension or creation of plants): location — Agadir, Safi.

Amount of investment: 3,500,000 DH. Jobs: 800 during three months in the year.

Exports estimated for 1968 will be distributed as follows:

— Sardines: 2,750,000 cases, value 130,000 DH

— S.P.S.A sardines: 100,000 cases, value 7,000,000 DH

— Mackerel: 7000 tons, value 10,000,000 DH. Total = 202,000,000 DH.

Administrative and technical measures must be taken to encourage the development of production and marketing of S.P.S.A and canned tunny. Sea research will be needed as well as distribution of export quotas.

I.. — FRUIT AND VEGETABLE JUICE

This sector mainly represents citrus juice. The internal demand being estimated at about 250,000 litres per year of citrus juice (direct consumption) and about 500 tons of concentrated tomato juice (fish canning industry), the activity of the sector is almost entirely aimed at export (above all the Common Market and Europe in general).

The production of factories during 1963 was as follows:

— Natural citrus juice	6,882,500	litres
— Concentrated » »	1,821,000	«
— Natural tomato juice	119,000	»
— Concentrated » »	3413	tons

The treatment capacity of citrus juice plants is about 70,000 tons of citrus fruit per year, taking into account the extensions in 1964. Tonnage available for the industry:

In 1968 the evolution of Moroccan production and the possibilities of export will leave available surplus of about 250,000 tons of citrus fruit (240,000 oranges).

Since the tonnage consumed directly has been estimated at 130,000 in 1959 an internal consumption of 180,000 tons seems desirable. Thus about 70,000 tons would remain for juice.

As regards tomatoes, there is less of a supply problem since it is an annual plant. There remains that of marketing, particularly acute in view of Italian competition.

Estimated investments are as follows:

— We shall have to contemplate the creation of a citrus juice plant having an overall treatment capacity of 30,000 tons, situated in the Gharb.

— In view of international competition, it would appear that multi-purpose units (citrus, tomatoes, fruit and vegetables) and those making full use of by-products have the best chance of proving viable.

The overall investment to be provided for will be about 12,000,000 DH.

Investments will also be needed for concentrated tomato, but the same consideration of profitability suggests that this production should be integrated inside multi-purpose units so far as the agronomic conditions prevailing will permit.

In 1968 production, bearing in mind technical improvement, will be as follows:

— Orange juice	24 million litres
— Grapefruit juice and other citrus	3 million litres
— Juice from concentrated tomatoes	6000 tons.

The internal market (direct consumption and sodas) will be able to absorb 3 million litres of citrus juice and 500 tons of concentrated tomatoes. The overseas market will absorb 24 million litres of citrus juice and 5500 tons of concentrate of tomato.

III. — CANNED FRUIT AND VEGETABLES

Exports for 1963 were as follows:

	Tonnage	Value in thousands of DH
Canned vegetables	5598	8800
Tomato concentrate	3254	5400
Semi-canned goods	7888	10,160
Canned fruit	13,640	14,330
	30,380	38,690

The possibilities of the overseas market allow us to expect exports for 1968 to amount to 35,000 tons for a value of 41,000,000 DH.

The present capacity of the plants is about 40-50,000 tons.

IV. — FISHMEAL FOR HUMAN CONSUMPTION

A plant with a production capacity of 300 tons per year will be in operation from the beginning of 1965 under the auspices of the F.A.O. Its production is intended to procure a cheap protein food element to fight malnutrition.

V. — FISHMEAL FOR CATTLE

In 1963 Moroccan factories produced 19,728 tons of fishmeal and 4647 tons of fish oil. Almost the total amount (25,000 tons) was exported to the value of 14,100,000 DH.

The evolution of the world market means that we may consider the creation of two plants producing 500 tons of fishmeal per year each. They will be located at Essaouira and Agadir. Investments will cost 1,600,000 DH for each plant.

There will be about 150 new jobs.

For production of 5000 tons of fishmeal and 1000 tons of oil, the turnover will be 3,600,000 DH.

SECTION IV

Miscellaneous food industries

1. — BREWERIES - MALT-HOUSES

In 1963 sales from Moroccan plants amounted to 234,000 hectolitres (instead of 322,000 in 1960) and imports came to 15,000 hl (instead of 40,000 hl in 1960). Overall demand in 1968 may approach 200,000 hl.

The production capacity of existing plants amounts to 450,000 hl and there is no need to look for further investment.

The value of the production of breweries will be 17,000,000 DH in 1968 and that of malt-houses about 900,000 DH.

2. — EFFERVESCENT DRINKS

The basis of these products is water, sugar and various chemicals. Fruit-sodas also use concentrated fruit juice.

Production, exclusively for the home market, was as follows in 1962:

Lemonades	120,000 hl
Sodas (citrus base)	170,000 »
Sodas (cola base)	190,000 »
	480,000 hl.

The increase in demand was about 20% until 1963, when difficulties due to the rise of internal prices for sugar, brought about a considerable drop in demand. Nevertheless, a rebate having been granted on sugar for these industries, it is likely that the growth of demand will recover as from 1965.

Requirements for 1968 may be estimated at 900,000 hl.

The capacity of existing plants being at present about 525,000 hl, extensions or new plants appear necessary to meet demand.

The necessary investments will amount to about 6,000,000 DH (4,000,000 for equipment) and the result will be the creation of about 310 jobs. 9500 tons of sugar and 2,700,000 litres of citrus juice will be consumed.

II. — **Industrial sectors**

CHAPTER IV

TEXTILES

SECTION I

Evolution of consumption

In 1959-60 the Statistical Department held an enquiry into the domestic consumption, the results of which enabled us to project future consumption bearing in mind the following factor:

a) Evolution of the standard of living

b) Population figures

c) Fashions in clothing.

This projection into 1968 of previous consumption may be considered as a minimum, since it was estimated on the assumption of constant expenditure on textiles.

The evolution of production and imports was not taken as a basis for calculation as the existence of considerable stock in hand falsifies the rate of growth determined on the basis of local production and imports.

— **Evolution of consumption calculated from the enquiry into consumption:**

Year	Total	Cotton	Staple-fibre	Wool	Rayon	Synthetic
1962	38.950	16.670	11.320	5.300	3.900	1.760
1968	44.550	18.830	13.120	6.020	4.440	2.140

These figures take into account the consumption of wool used by artisans and family auto-consumption for making blankets, jellabas and carpets (2500 tons).

The above table gives the distribution of fibres consumed but does not take into account the methods of manufacture employed to obtain the various materials. We should therefore distribute overall consumption between the different technical cycles of production.

The table below was drawn up taking this into account.

Distribution of demand in 1968 according to technical production cycles (in tons)

— Spinning cards	7000
— Combed wool	3000
— Traditional cotton	28,000
— Continuous thread weaving	6600
Total	44,600

SECTION II

Spinning, weaving and finishing

1) SPINNING CARD CYCLE

In this cycle we classify all textile articles obtained from recovered fibres (rags, waste etc.) and virgin fibres (wool, staple-fibre or synthetic).

This sector produces:

— Handicraft articles, blankets, jellabas and carpets
— Heavy draperies, blankets and duffel
— Thread for furnishing fabrics
— Some fulled hosiery articles.

a) **Spinning :**

Requirements for 1968	7000 tons
Capacity 31.12.64	8000 tons

(there are 13 factories working and two handicraft workshops in the process of equipment).

Production 1963	3200 tons

(this figure does not take account of hand spinning).

Production has been used as follows:

— Handicraft thread	1900 tons
— Thread for weaving blankets etc.	900 tons
— Thread for furnishing fabrics	400 tons

b) **Weaving:**

This branch only comprises the manufacture of fulled drapery and blankets. Furnishing fabrics are included under continuous spinning (rayon). (7 weaving establishments specialise in this).

Production 1962	900 tons

Only investments for modernisation and adaptation of equipment to new fibres should be encouraged.

The amount of investment can be estimated for the whole sector at 5,000,000 DH.

2) Combed wool cycle - light drapery

This cycle is concerned with the following lines:

a) Drapery (light and combed wool), synthetic and staple fibre
b) Thread for hosiery
c) Thread for hand-knitting
d) Thread for handicraft blankets.

Raw materials

a) Wool tops
b) Staple-fibre tops and synthetic fibres
c) Mass staple-fibre
d) Mass wool (for carpet roves and artisans' yarn).

a) **Spinning:**

Requirements 1968	3000 tons
Production capacity 31.12.64	1500 tons

1963 production was 1000 tons distributed as follows:

— Weaving thread	150 tons
— Haberdashery thread	100 tons
— Hosiery	
— Carpet roves	

Projects in process of completion: 1000 tons, 500 tons of which will be provided by extension of existing installations to manufacture synthetic fibre thread not yet produced in Morocco and 500 tons for the projected creation of a spinning-mill using staple-fibre ribbons on the principle of semi-combed wool spinning.

b) **Weaving:**

Requirements 1968	3000 tons
Production capacity 31.12.64	1500 tons
Current projects	200 tons.

II. — THE COTTON NDUSTRY

This sector is concerned with all traditional production, viz.

— Working clothes
— Household linen
— Hosiery thread

Raw materials:

a) Cotton, medium and long staple

b) Staple-fibre, cotton type, synthetic fibres.

1) **Spinning:**

Requirements 1968	28,000 tons
Production capacity 31.12.64 (7 factories)	9500 tons
Production 1963	6000 tons.

Projects which, it seems, will certainly be carried through during the 1965-68 period will have a potential of 12,500 tons.

These projects are located at Nador and Tangier.
The situation in the spinning sector is as follows:

Requirements 1968		28,000 tons
Capacity 31.12.64	9500 tons	
Current projects	3000 tons	
Capacity. 1968		12,500 tons
Available		15,500 tons

2) **Cotton weaving:**

Requirements 1968	24,000 tons
Capacity 31.12.64	7000 tons
Production 1963	4300 tons

(12 factories are in operation).

Cotton weaving plants only work two shifts. This explains the difference between potential and actual production in 1963.

Four projects will be carried through in the 1965-68 period, which will bring weaving capacity up to 13,000 tons.

Location will be at Tangier, Fez, Casablanca and Nador.
Situation of the weaving sector:

Requirements 1968		24,000 tons
Capacity 31.12.64	7000	
Current projects	6000 tons	
Capacity 1968	13,000 tons	
Available	11,000 tons.	

3) **Finishing**

On 31st. December 1964 Morocco had a production potential 50% above its weaving capacity. It is essential to restrict investments in this sector to integrated plants alone.

III. — INDUSTRY FOR WEAVING SYNTHETIC FIBRES (OR ARTIFICIAL)

— Articles manufactured

- Material for clothing
- Furnishing fabrics
- Material for embroidery

Raw materials

All yarn from artificial or synthetic fibres is imported. The main thread used is rayon or nylon.

Requirements 1968	6600	tons
Production capacity 31.12.64	4500	»
Projects in process of completion	1000	»
Production 1963	2800	»

The workshops only work two shifts.

This sector has been greatly developed since 1960. Its equipment should be watched attentively.

The new investments should be channelled towards a diversification of production and especially towards work with synthetic fibres.

Consumption of rayon material in Morocco is a higher percentage than the world average and, although demand is increasing, we may expect the market to be saturated during the next few years.

IV. — THE HARD FIBRE INDUSTRY

1) Jute

Articles manufactured

- Sacks all types
- Jute cloth
- String

Raw materials

- Raw imported jute
- Moroccan "téal" fibres

Requirements 1968	12,000	tons
Production capacity 31.12.64	6000	»
Production	4655	»

The jute industry is a necessary complement to the recovery of imported bags containing raw sugar or other food products.

At present the country has to meet requirements with the two existing factories, but two new factors may well change the situation completely:

- The eventual transport of sugar in bulk and storage in silos
- A sugar policy tending to supply the need for sugar from beet-sugar production
- Export of rich fertilizer sisal.

2) The sisal industry

Articles manufactured:

- Tying string
- Packing string
- Cord

Raw materials

- Imported sisal fibres
- Local » »

Requirements 1968	4000 tons
Production capacity 31.12.64	3500 »
Projects in process of completion	1800 »
— Production 1963	3100 »

SECTION III

Made up textiles

1. — KNITTED GOODS, HOSIERY ETC.

Articles manufactured:

— Cotton vests
— Woollen, staple-fibre and synthetic vests

Raw materials:

— Cotton thread
— Woollen and staple-fibre thread
— Textured synthetic thread

Requirements 1968	3100	tons
— Apparent production capacity	5000	»
— Actual capacity taking into account the seasonal nature of the industry	3500	»
— Production 1963	2100	»

This sector is well equipped but a very rapid evolution of technical equipment compels industrialists to make investments.

2. — MECHANICAL EMBROIDERY

Articles manufactured:

— Embroidery for traditional women's garments

Raw materials:

— Cloth backing, nylon or rayon
— Rayon thread

Requirements 1968	350	tons
Production capacity 31.12.64	300	»
Projects in process of completion	190	»

This sector has developed exceptionally. Before 1960 two factories possessed 20 embroidery pantograph looms which only worked at a slow rate. Since then 14 looms have undergone automation, 35 modern looms have been put into operation and 20 looms remain to be installed.

Present potential can meet almost all local needs. Only a remarkable rise in demand could justify new investments.

III. — MADE-UP CLOTHES

This sector comprises two groups:

a) Upper garments

b) Shirts and underclothing.

These two groups are both well developed in Morocco and comprise a range of workshops from the handicraft stage to the most modern facilities.

Total turnover for this branch is about 105 million DH.

This sector is accessible to small investors and that is the reason why a great many workshops are being set up.

SECTION IV

Production of synthetic and artificial fibres

Consumption of artificial fibres approaches 15,000 tons of which 4000 tons are rayon and 11,000 tons staple-fibre.

Requirements for 1968 will be 17,500 tons including 4400 tons of rayon and more than 13,000 tons of staple-fibre.

One project is being studied at present for the manufacture of some of the fibres for the home market from soluble pulps produced in Morocco.

⁂

RECAPITULATION OF THE TEXTILE SITUATION

CYCLE		1963 Production (tons)	1968 requirements (in tons)	Capacity 31.12.64 (in tons)	Projects in process of completion (in tons)
Cards	spinning . . .	3.200	7.000	8.000	Nil
	and weaving.	900	2.000	2.000	Nil
Combed wool and drapery	spinning . . .	1.000	3.000	1.500	1.000
	and weaving.	250	3.000	1.500	200
Trad. cotton	spinning . . .	6.000	28.000	9.500	3.000
	and weaving.	4.300	24.000	7.000	6.000
Continuous fibre weaving		2.800	6.600	4.500	1.000
Knitted goods, hosiery. . . .		2.100	3.100	3.500	Nil
Embroidery		190	350	300	50
Jute industry		4.655	12.000	6.000	—
Sisal industry		3.100	4.000	3.500	1.800

SECTION I

The paper and cardboard industry

. — PAPER PULP

	1963	1968
roduction	30,268 tons	43,000 tons
apacity	35,000 tons	45,000 tons
mports	13,219 tons	27,000 tons

The pulp production at Sidi Yahia du Gharb, at present 30,000 tons, will reach 38,500 tons in 1965.

This production will then reach the culminating point of 60,000 tons which is the average dimension of a modern undertaking of this type.

However, it will not be until 1970 that the necessary work can be completed, since production potential is tied to the new eucalyptus reafforestation scheme.

Investment: about 25 million DH
New jobs: 100 (plant)
1500 (forest work)

II. — MANUFACTURE OF PAPER AND CARDBOARD

	1963	1968
Production	40,962 tons	69,000 tons
Capacity	45,000 »	79,000 »
Imports	31,283 »	25,000 »

Production, which has varied little since 1961, will increase over the next few years:

— Owing to the extension of the range of articles manufactured under "paper-making"

— Owing to the use of cardboard cases for conditioning citrus fruit.

At the same time Moroccan manufacture is slowly taking the place of some papers at present imported, which will correspondingly reduce imports.

Investment: 10 million DH

— New jobs: 100.

III. — PROCESSING OF PAPER AND CARDBOARD

1) American cases

	1963	1968
Production	10,115 tons	20,500 tons
Capacity	16,000 »	22,000 »
Imports	112 »	250 »

The cardboard case will be an important development if it is finally adopted for the conditioning of citrus fruit. Satisfactory tests were carried out during the last season and these tests will be continued on an industrial scale next season.

The increase in cardboard tonnage utilised will require considerable investment:

Investment: about 600,000 DH

New jobs: 50.

2) Large-size bags

	1963	1968
Production	5000 tons	6000 tons
Capacity	13,500 »	13,500 »
Imports	negligible	d°

Production in this sector is tied to the expansion of cement works for two thirds of tonnage manufactured.

Considerable progress could nevertheless be made by the general use of paper bags for conditioning some products such as fertilizer.

Maintenance investment: 200,000 DH.

3) Other paper and cardboard packaging

	1963	1968
Production	23,000 tons	24,000 tons
Capacity	30,000 »	30,000 »
Imports	731	1000 »

The sector is only slightly expandnig, mainly due to the present recession in some branches (small bags in particular).

Equipment can easily meet demand, which is up by 50%, and therefore little investment is required.

Investment: 1 million DH

(for renewal)

4) **Stationery articles**

	1963	1968
Production	3500 tons	4500 tons
Capacity	6000 »	6000 »
Imports	339 »	400 »

The sector is well enough equipped to meet demand. No investment.

IV. — DUPLICATING MATERIAL

	1963	1968
Production	12,000 tons	15,000 tons
Capacity	20,000 »	25,000 »
Imports	2032 »	2500 »

This sector follows the evolution of techniques by a major investment plan. The spread of education will further production.

⁂

PAPIERS ET CARTONS

ACTIVITES 1963

Activités	Unités	Productions	Importations	Ressources	Exportations	Consommations
Pâte à papier	T.	30.268	13.219	43.487	29.085	14.402
	M. DH	16.650	8.059	24.709	16.000	8.709
Papiers et cartons en l'état	T.	40.692	31.283	71.975	14.207	57.768
	M. DH	46.543	34.047	80.590	13.224	67.366
Papiers et cartons transformés					(1)	
a) caisses américaines	T.	10.115	112	10.227	10	10.217
	M. DH	13.800	297	14.097	22	14.075
b) sacs à grande contenance.	T.	5.000	—	5.000	55	4.945
	M. DH	7.725	—	7.725	76	7.649
c) autres emballages en papier et carton .	T.	23.000	731	23.731	40	23.691
	M. DH	45.000	4.568	49.568	73	49.495
d) articles de papeterie	T.	3.500	339	3.839	—	3.839
	M. DH	14.500	1.869	16.369	—	16.369
Industries polygraphiques	T.	12.000	2.032	14.032	913	13.119
	M. DH	67.000	16.663	83.663	2.418	81.245

---

(1) Non compris les 4.000 tonnes environ exportées sous forme d'emballage de produits marocains.

PAPER AND CARDBOARD

GLOSSARY

"Emballage" = packaging

"Papeterie" = stationery articles

"Polygraphiques" = connected with duplicating.

SECTION II

The leather industry

I. — INDUSTRIAL TANNERIES

In 1963 industrial tanneries produced 3.9 million DH worth of heavy leather and 32 million dressed skins.

Exports amounted to one million DH for leather and 15.5 million for dressed skins.

In view of present difficulties there is a movement in favour of concentration of plants.

No investment is provided for but it will be necessary to:

a) Improve the quality of skin removal both in official slaughter-houses and in local markets.

b) Reorganise the collection of raw skins to ensure proper conservation.

c) Create an official market for skins allowing for price and quality control.

This industry has been passing through a difficult phase, due not only to the unfavourable world situation but to difficulty of supply of raw materials as a result of over-equipment in this sector.

This situation justifies the protective measures in force. Other measures could be studied if the situation does not improve.

II. — SHOES

1) Leather shoes

In 1963 production amounted to 2,600,000 pairs.

Exports amounted to 700,000 pairs and imports to 200,000.

Consumption amounted to 2,100,000 pairs.

In 1968 production will reach 3,300,000 pairs of which 700,000 will be exported. Imports will be about 200,000 pairs and consumption 2,800,000.

Production capacity is more than 3,500,000 pairs. No investment required.

2) **Rubber, cloth and plastic shoes**

The market is relatively stable and at present 4,900,000 pairs are being turned out.

In 1968 production will reach 6,000,000 pairs. Exports will be at about 400,000 pairs.

3) **Conclusion**

Production capacity in this industry exceeds local demand and part of production is exported. It would seem reasonable to propose the creation of a shoemaking industry with a much wider base than at present and a slight shift of this labour-consuming industry from the industrial areas in western Europe to the countries of North Africa and Morocco itself in particular.

This new industry, which would be exclusively for export, would have to work in closely with European commercial circuits. We might consider the idea of installing branches or subsidiaries of European firms, possibly in the Tangier Free Zone.

SECTION III

Vegetable fibre

The greater part of the production of this material (90%) is exported. The local market absorbs the inferior quality, the volume of which is more or less stable — about 10,000 tons.

This is a seasonal activity and the 180 existing plants only work for seven months a year, giving employment to about 25,000 persons.

SECTION IV

Building materials – China and glassware

I. — CEMENT

	1963	1968
Production	762,000 tons	990,000 tons
Imports	4000 »	7000 »
Capacity	900,000 »	1,200,000 »

Imports are in respect of special qualities not obtainable in Morocco. Three quarters of production is used for buildings and public works. The rest is for the manufacture of agglomerated cement, maintenance and domestic purposes.

Increased demand will cause the cement factories to step up their production capacity as far as possible by gradually doing away with bottlenecks in order to function normally at 85% of maximum capacity.

Investment: 25,000,000 DH
Jobs created: 200.

As an ancillary activity we may note the production of agglomerated cement and asbestos, the value of which is 20,234,000 DH and which operates at 70% of maximum capacity. Such sales represent about 190,000 tons of products and should develop at the rate of 10% (i.e 250,000 tons in 1968).

Investment: 3,000,000 DH
Jobs created: 50.

II. — BRICKS AND BUILDING TILES

	1963	1968
Production	99,000 tons	115,000 tons
Imports	120 »	120 »

The production noted above refers to really industrial undertakings, but there are numerous handicraft industries, dispersed here and there. Their production is estimated at 60,000 tons. The rate of growth has been increasing considerably since 1963. The factories operate to 75% of their capacity and may consider extensions during the Plan period.

Investment: 1,500,000 DH
Jobs created: 50.

III. — REFRACTORY BRICK

	1963	1968
Production	6750 tons	8000 tons
Imports	498 »	800 »

Certain creations of the Three Year Plan justify production estimates which recent consumption figures did not suggest.

The existing undertaking should be able to meet the meeds of the market and a possible increase in exports.

Estimated investment: 850,000 DH
Jobs created: 10.

IV. — SANITARY CHINA

	1963		1968
Imports	1499 tons	Imports	800 tons

There is no local production and imports more or less correspond to the requirements of the market.

V. — TILES - CROCKERY

1963		1968	
Handicraft production of tiles estimated at	500 tons	Handicraft production:	
		industrial	3000 tons
		handicraft	550 »
Imports	4697	imports	2500 »

These two activities, which are usually separated, have been grouped together since they use the same raw materials, the same techniques and to a great extent the same equipment.

The requirements for tiles, which had doubled in 1958-62, will soon increase at the same rate as building (10% per year).

The demand for crockery is tending to stabilise. It is possible to foresee the creation of a tile factory using local raw materials on the basis of a minimum capacity of 4800 tons and sanitary china might be added to this sector in order to make more rational use of a part of the raw materials.

Investment: 2,600,000 DH
Jobs created: 70.

VI. — BOTTLE GLASS

	1963	1968
Production	10,100,000 DH	12,000,000 DH
Imports	4,626,000 »	4,000,000 »
Exports	1,001,000 »	1,000,000 »

Local production does not work to full capacity.

To imports we must add bottles from abroad containing mineral water etc. which, by being used again, reduce the demand of the local market.

Investment: 3,000,000 DH
Jobs created: 50.

VII. — **WINDOW GLASS**

	1963	1968
Production	0 »	4000 »
Imports	3480 tons	500 »

Demand has varied little over the last years. It represents 400,000 m2 of window-panes.

The manufacture of window glass might be contemplated on the basis of restoration of a plant which had closed down in 1954, with of course major changes in equipment.

Investment: 5,000,000 DH
Jobs created: 80.

⁂

Matériaux de construction - Céramique et verrerie

Activités de 1963

Activités	Unités	Productions	Importations	Ressources	Exportations	Consommations
Ciments	M.T.	762	4	766	18	748
	M. DH	64.767	642	65.409	1.319	64.090
Briques, tuiles et blocs	M.T.	99	0,12	99,12	0,46	98,66
	M. DH	5.841	3	5.844	13	5.831
Briques réfractaires	T.	6.750	498	7.248	3.250	3.998
	M. DH	3.174	489	3.663	1.540	2.123
Plâtre	T.	4.132	6	4.138	1.900	2.238
	M. DH	203	3	206	95	111
Céramique sanitaire	T.	0	1.499	1.499	—	1.499
	M. DH	0	1.696	1.696	—	1.696
Carreaux Vaisselle	T.	?	4.697	?	205	?
	M. DH	?	4.873	?	284	?
Verre creux	T.	1.490	3.815	5.305	563	4.742
	M. DH	10.100	4.626	14.726	1.001	13.725
Verre plat	T.	0	3.480	3.480	—	3.480
	M. DH	0	1.760	1.760	—	1.760
Verre de sécurité, décors et miroirs	m2	10.650	950	11.600	—	11.600
	M. DH	1.102	994	2.096	—	2.096

GLOSSARY

"Verre creux" = bottle glass

"Verre plat" = flat glass

"Verre de sécurité" = safety glass.

TABLEAU RECAPITULATIF

des Investissements Industriels prévus dans le cadre des réalisations du Plan Triennal 1965 - 1967

(Chiffres en milliers de dirhams)

Secteurs	Investissements Publics	Investissements Privés	Total des investissements	Financement Public 1965-1967
I. — *INDUSTRIES DES METAUX*				
A. — Industries métallurgiques				
1. - Sidérurgie ..	(1) 50.000	—	(1) 50.000	10.000
2. - Autres industries				
- Métallurgie du zinc	20.500	61.500	82.000	10.000
Total ...	70.500	61.500	132.000	20.000
B. — Industries de transformation				
1. — Première transformation des métaux				
a) tréfileries et pointeries ...	—	200	200	—
b) câbles et tubes d'acier	—	9.550	9.550	—
c) aluminium ..	—	3.000	3.000	—
d) plomb	—	100	100	—
Total		12.850	12.850	

---

(1) Des 3 variantes actuellement à l'étude et figurant dans le plan Triennal, la variante n° 2 a été conventionnellement choisie pour l'établissement de ce tableau récapitulatif.

Secteurs	Investissements Publics	Investissements Privés	Total des investissements	Financement Public 1965-1967
2. — Biens d'équipement				
a) Fonderie - robinetterie ...	—	1.500	1.500	—
b) Charpente et tôlerie	—	2.500	2.500	—
c) Forge et estampage	—	9.000	9.000	—
d) Moteurs à combustion interne	—	600	600	—
e) Pompes	—	1.500	1.500	—
f) Matériel ferroviaire	—	1.300	1.300	—
g) Tracteurs agricoles	—	1.500	1.500	—
h) Matériel de culture	—	1.500	1.500	—
i) Serrurerie - ferronerie ..	—	200	200	—
j) Câbles et fils électriques ..	—	1.800	1.800	—
k) Moteurs et transformateurs électriques	—	2.000	2.000	—
l) Emballages métalliques ..	—	3.000	3.000	—
Total	—	26.400	26.400	—
3. — Fabrications de véhicules				
1. - Camions ...	—	4.000	4.000	—
2. - Automobiles.	—	5.000	5.000	—
3. - Motocycles et vélomoteurs .	—	1.500	1.500	—
Total	—	10.500	10.500	—

Secteurs	Investissements Publics	Investissements Privés	Total des investissements	Financement Public 1965-1967
4. — Biens de consommations				
a) Appareils réfrigérateurs	—	800	800	—
b) Machines à coudre	—	1.200	1.200	—
c) Articles de ménage	—	500	500	—
d) Mobiliers métalliques ..	—	150	150	—
e) Appareils de chauffage ...	—	2.000	2.000	—
f) Radio - TV ..	—	2.700	2.700	—
TOTAL	—	7.350	7.350	—
II. - *INDUSTRIES CHIMIQUES ET PARACHIMIQUES*				
A. — Industries chimiques de base				
1. - Complexe Chimique de Safi	90.000	—	90.000	90.000
- Tripolyphosphate de soude	2.000	4.300	6.300	1.000
- Traitement des cendres de pyrhotine	9.000	9.000	18.000	5.000
2. - Ammoniac, naphta, bitume	—	(1) 40.000	(1) 40.000	—
3. - Soude, chlore, P.V.C.		11.000	11.000	
4. - Pâte d'alfa ..	45.000	—	45.000	20.000
Total ...	146.000	64.000	210.300	116.000

---

(1) Variante projet intégré : ammoniac, naphta, bitume (Safi).

Secteurs	Investissements Publics	Investissements Privés	Total des investissements	Financement Public 1965-1967
B. — Les industries Chimiques et Parachimiques diverses				
1. — Caoutchouc .				
a) Pneus et chambres à air	—	1.000	1.000	—
b) Caoutchouc manufacturé . .	—	7.000	7.000	—
2. — Plastiques . .	—	—	—	—
3. — Autres industries parachimiques et pharmaceutiques				
a) Ordures ménagères	3.240	—	3.240	1.500
b) Lessives et produits d'entretien	—	800	800	—
c) Peintures et vernis	—	2.300	2.300	—
d) Insecticides et fongicides . . .	—	1.000	1.000	—
e) Huiles essentielles	—	800	800	—
f) Parfumerie . . .	—	150	150	—
g) Savonnerie . . .	—	1.000	1.000	—
h) Pharmacie . . .	—	4.600	4.600	—
i) Allumettes . . .	—	800	800	—
j) Vitamines	—	2.800	200	—
Total	3.240	25.250	28.250	1.500
III. — *INDUSTRIES ALIMENTAIRES*				
A - Sucre	240.000	—	240.000	173.000
B - Levurerie . . .	—	3.550	3.550	—
C - Confiserie . .	—	1.000	1.000	—
D - Jus de fruits	—	12.000	12.000	—
E - Farine de poisson . . .	—	3.200	3.200	—
F - Boissons gazeuses . .	—	6.000	6.000	—
G - Trituration des graines oléagineuses	—	10.000	10.000	—
H - Conserves de poissons . .	—	5.300	5.300	—
Total	240.000	41.050	281.050	173.000

Secteurs	Investissements Publics	Investissements Privés	Total des investissements	Financement Public 1965-1967
IV. — *INDUSTRIE TEXTILES*				
A. - Industries de la laine				
1. Cycle « cardes fileuses »	—	5.000	5.000	—
2. Cycle « peigné »	—	4.000	4.000	—
B. - Industries du coton	49.000	40.000	89.000	14.000
C. - Industrie tissage des fibres synthétiques et artificielles continues .	—	18.000	18.000	—
D. - Industries confection d'articles textiles				
1. Bonneterie	—	3.000	3.000	—
2. Confection	—	3.000	3.000	—
3. Broderie	—	5.000	5.000	—
	49.000	78.000	127.000	14.000
V. - *INDUSTRIES DIVERSES*				
A. - Papiers et cartons				
1. Pâte à papier ..	—	25.000	25.000	—
2. Papiers et cartons	—	10.000	10.000	—
3. Papier transformé	—	1.800	1.800	—
B. - Matériaux de construction				
1. Ciment	—	25.000	25.000	—
2. Aggloméré	—	3.000	3.000	—
3. Briques et tuiles	—	1.500	1.500	—
4. Briques réfractaires	—	850	850	—
5. Céramique sanitaire	—	2.000	2.000	—
6. Céramique ménage	—	2.600	2.600	—
7. Verre creux	—	3.000	3.000	—
8. Verre plat	—	5.000	5.000	—
	—	79.750	79.750	—

RECAPITULATION

Secteurs	Investissements Publics	Investissements Privés	Total des investissements	Financement Public 1965-1967
	Fonds de roulement exclus			
I. - *INDUSTRIES DES METAUX*				
A. - Industries métallurgiques ..	70.500	61.500	132.000	20.000
B. - Industrie de transformations .	—	—	—	—
— Première transformation	—	12.850	12.850	—
— Biens d'équipement	—	26.400	26.400	—
— Véhicules ...	—	10.500	10.500	—
— Biens de consommation ..	—	7.350	7.350	—
II. - *INDUSTRIES CHIMIQUES ET PARACHIMIQUES*				
A. - Industries chimiques de base	146.000	64.300	210.300	116.000
B. - Industrie chimique et parachimiques diverses	3.240	25.250	28.490	1.500
III. - *INDUSTRIES ALIMENTAIRES*	240.000	41.050	281.050	173.000
IV. - *INDUSTRIES TEXTILES*	49.000	78.000	127.000	14.000
V. - *INDUSTRIES DIVERSES*	—	79.750	79.750	—
TOTAL	508.740	406.950	915.690	324.500

NOTA. — En ce qui concerne le secteur public, la mobilisation des crédits prévus est partiellement liée à la réalisation de projets spécifiques, ainsi qu'il sera noté dans le chapitre relatif au financement. La prévision initiale du Plan ne retient donc en première analyse que des dépenses jugées incompressibles auxquelles s'ajoute la consolidation d'engagements antérieurs.

RECAPITULATORY TABLE OF INVESTMENTS PROPOSED UNDER THE THREE YEAR PLAN (in thousands of dirhams)

GLOSSARY

I. — INDUSTRIE DES METAUX = METAL INDUSTRY

"Sidérurgie" = iron and steel
"industries de transformation" = processing industries
"Tréfilerie" = wire-drawing
"Plomb" = lead
"Fonderie-robinetterie" = brass-founding
"Charpente et tôlerie" = structural metal and sheeting
"Matériel ferroviaire" = railway equipment
"Matériel de culture" = farming equipment
"Serrurerie" = lock-making
"Emballage" = packaging
"Camions" = trucks.
"Biens de consommation" = consumer goods
"Machines à coudre" = sewing machines
"Mobiliers métalliques" = metal furniture
"Appareils de chauffage" = heating appliances
"Pâte d'alfa" = esparto-grass (alfa) pulp
"Caoutchouc" = rubber
"Pneus et chambres à air" = tyres and inner tubes
"Ordures ménagères" = household waste (treatment of)
"Lessives" = lyes
"Peintures et vernis" = paint and varnish
"Huiles essentielles" = essential oils
"Savonnerie" = soap-making
"Allumettes" = matches

INDUSTRIES ALIMENTAIRES = FOOD INDUSTRY

"Sucre" = sugar
"Levurerie" = yeast
"Confiserie" = confectionery
"Jus de fruits" = fruit juice
"Farine de poisson" = fishmeal
"Boissons gazeuses" = effervescent drinks
"trituration de graines oléagineuses" = trituration of oilseeds

"Conserve de poissons" = fish canning
"Industries de la laine" = wool industry
"cardes fileuses" = spinning cards
"peigné" = combed wool
"Tissage" = weaving
"confection" = making up material (for clothing etc.)
"bonneterie" = hosiery, knitted goods
"Broderie" = embroidery
"Pâte à papier" = paper pulp
NDUSTRIES DES METAUX = METAL INDUSTRY.

III. – HANDICRAFTS

The definition of this sector is rather complicated. For urgent practical purposes we will suppose that an "artisan" in specifically:

— An urban worker belonging to the great traditional centres of handicrafts

— A man who deals with certain definite products (textiles, leather, wood, metals etc.) according to more or less non-mechanical techniques.

At this level it appears that a useful distinction may be made between:

— an artistic worker

— a utilitarian worker

The artist provides a quality and an individual technique which alone will prevent him from decline or disappearance. At a time when there is a great demand for artistic or luxury goods of this kind, handicrafts are definitely to be encouraged.

On the other hand utilitarian handicrafts are directly threatened with competition by modern techniques, especially mechanical, which are bound to supplant archaic methods. This competition means, on a short-term basis, continual slackening of activity and reduction of income and, on a long-term basis the more or less total disappearance of this kind of craft.

The essential problem is therefore to effect a reconversion without the evolution being too abrupt. This probably sums up the whole problem of the passage from a handicraft economy to an industrial one. Direct action on the artisan alone will not bring industrialisation. We may nevertheless endeavour to see that these artisans, by a more elaborate training and regroupment, are channelled into artistic work or more industrial forms of production.

This is the Plan policy.

The figures given for handicrafts are still uncertain at the present time and thorough study is required.

If we refer to the provisional results of an enquiry carried out in 1962 (a multi-purpose enquiry) affecting some 500,000 homes, (230,000 rural and 270,000 urban) who in whole or in part derive a slender income (500 DH per year) from handicrafts, we can estimate the number of such artisans in Morocco at 250,000.

Supposing that about a quarter of them are already workin on artistic handicrafts, there are 200,000 artisans to be reconverte on a long-term basis. In fact it is impossible to revolutionise a secto like this in a few years and solely by direct action on the artisans The evolution must be gentle but inevitable.

In order to prepare this long-term evolution, without its bein too abrupt, the Plan intends to give the Department of Handicraft the technical and administrative staff it needs.

It has to :

— Promote the reconversion of sectors directly threatened with com petition

— Develop artistic handicrafts

— In general, improve by marketing and credit measures income which are going down and down.

I. — RECONVERSION OF UTILITARIAN HANDICRAFTS

This reconversion, whether it is in favour of artistic productio or more productive methods, is only possible and desirable in definite sectors: leather, weaving, woodwork and pottery.

Since the rate of reconversion depends essentially on the technical personnel available, an effort must be made with priority to complete the National Institutes, which are the Ecoles Normales de l'Artisanat and apprentice centres.

Moreover, we shall try to apply the formula of production units in order to see to what extent this can become wide-spread within a systematic policy of reconversion.

1) The National Institutes

The Five Year Plan had provided for the creation of three national institutes (textiles, leather and pottery) intended to play the part of "Ecoles Normales" (Training of Instructors for Apprentice Centres), and at the same time centres for the spread of new techniques and materials in order to give handicrafts a new lease of life.

The Three Year Plan will see the completion of the Institut National du Textile et du Cuir at Fez and the tanners' apprentice centre at Beni Mellal which will also serve as a research centre for the leather industry as a whole.

2) Apprentice Centres

Out of 37 centres provided for under the Five Year Plan 32 were completed or nearly completed in 1964.

The Three Year Plan will not create new centres but will merely help along those which were on the point of completion. It has provided for an overall equipment credit which will be used appropriately after a thorough study of requirements. This study, ordered by the Under-Secretary of State in charge of professional training, is intended to define objectively the priority sectors. We should note that two operations are being carried out with the assistance of A.I.D. They are the Apprentice Tanners' School at Beni Mellal and the precious stone school in Rabat.

The apprentice centres have an essential role to play in encouragement of handicrafts. They will aim not only at training better artisans but also at exploiting to the uttermost the artistic characteristics of each region. It is therefore desirable to combine the spread of centres with a regionalisation policy affecting the arts taught.

At the present time in each centre apprentice training is on the basis of uniform teaching. Weaving, for example, is taught in the same way from north to south. If we were to take advantage in each region of local techniques and arts, pupils would more rapidly assimilate progressive techniques, since it would be a matter of arts already well known to them, and they would preserve the artistic and original traditions of the region.

To sum up, Morocco will soon have an imposing network of apprentice centres. This is a capital which must be made to work in the best conditions. Certain difficulties, however, show that there is still much to be done. These centres should have priority treatment by the Handicrafts Department.

3) Production units

Since the Five Year Plan, the creation of production units, gathering a number of artisans round more productive techniques and co-operative management, can be seen as one of the keynotes of the reconversion of the handicraft industry during the Three Year Plan.

Unfortunately the programme was not carried out for lack of proper procedure for implementation.

However interesting the solution may be, we must be on our guard against an attempt to generalise. Thus, without excluding the possibility of creating further production units during the plan period, we should restrict ourselves during the first phase to two production units, one for textiles and the other for leather. They will be located in Fez.

This creation, which will cost 1,600,000 DH, will be realised in the following conditions:

— Equipment will he the direct responsibility of the Institut National du Textile et du Cuir in Fez.

— Management of the production unit will at the outset be handed over to a Co-operative Society directed by a representative of the Institut National.

— The financing of the project will come from public funds under an organisation to be named, which would control the use of credits and at the same time supervise the general running of the unit in order to ensure by degrees an independent financial management on a healthy basis.

The success of the production unit scheme means that artisans must develop a spirit of co-operation and a real desire for improvement. Moreover it will only be feasible on a large scale if a technical assistance and financial organisation is created.

The artisans must be supplied with a consistent quality of wool yarn adapted to their needs and at a price equal to that charged to industrial processers or middlemen. This action must be carried out by the Department of Industry in association with the Handicrafts Department.

II. — ENCOURAGEMENT OF ARTISTIC HANDICRAFTS

This includes various activities:

— Creation in the main apprentice centres of an information unit where the artisan can find technical facts and moreover inspiration.

— Grant of scholarships abroad for some artistic workers, as was done during the Five Year Plan (Ecole des Beaux-Arts, Rome etc.).

— Legal protection for artistic production against imitation and counterfeiting, also the institution of quality labels to encourage high quality work and help exports.

— All other forms of assistance such as orders placed by the State etc.

III. — APART FROM ACTION MENTIONED ABOVE ENCOURAGEMENT OF HANDICRAFTS MUST WORK FOR:

— Improvement of tools used, by determining with the Banque Populaire and the BNDE the procedure for the best form of credit.

— Development of the commercial side of handicrafts.

At the present time, apart from private marketing organisations, there are two organisations for marketing handicrafts: the "Maisons de l'Artisanat", whose activity is mainly directed towards foreign markets and which has delegates in the main handicraft centres, and also COPARTIM, which has about ten sales posts on the local market and makes purchases from its own artisans.

While extending their scope of work, these two organisations, which have been given sufficient means and should co-ordinate their activities, must organise sales posts in ports and aerodromes. These wil act as permanent exhibitions for Moroccan handicrafts and as outlets to the foreign market. Private people, themselves artisans, can also be encouraged to take part in this work.

A thorough study of marketing for handicrafts will be made with a view to promoting the extension of sales. This study will determine the most appropriate structure for one or more marketing organisations.

The development of quality control is of capital importance. The extension of the stamping system to leather goods will become effective during the Plan. The cost of equipment will be 100,000 DH.

RECAPITULATION

	1965	1966	1967	Totals
— Institut National du Textile (1) et du Cuir				
— Beni Mellal Tannery (1)				
— Apprentice centre for cutting precious stones (1)				
— Production units	200.000	600.000	800.000	1.600.000
— Stamping	100.000			100.000
Total	300.000	600.000	800.000	1.700.000

---

(1) The programme of credits concerned with these operations comes under heading IV of the section "specialised education".

Remarks

The programme which has been approved may seem suprisingly modest for the uninitiated.

In fact, although it is true that the problem of the prosperity of artisans affects an important fraction of the population, the solutions to be applied are from being the exclusive preserve of public investment and budgetary subsidies have never been a real remedy for the improvement of structures.

The Handicrafts Department has presented an ambitious three-year programme necessitating public expenditure of 27,314,000 DH, more than 20,000,000 DH for production units.

If we accept the question of training dealt with under Section III "Training", reconversion of handicraft workers can be settled during the Plan period.

Conversely the failure of a production unit would be a burden to the community and would ruin the idea of the scheme in the minds of the public.

Both caution and financial restraint have combined to test, during the Three Year Plan, an experiment which, if it succeeds, may be profitably extended without heavy expenditure by the State.

SECTION IV

FISHERIES AND MERCHANT NAVY

This department's equipment programme takes due account of the rigorous financial restraints established by the Three Year Plan.

Thus only the most urgent operations have been considered. This means the minimum aims which must be attained by 1967.

The total amount of earmarked credits requested is 1,460,000 DH.

Nevertheless we must add the allocations in favour of naval schools which come under the heading "Training" and are recalled here as an indication:

1965	—
1966	810,000
1967	1,000,000
	1,810,000

I. — ADMINISTRATIVE SUBSTRUCTURE

We have to modernise and adapt the administrative substructure of the Department to the pattern of our sea-board.

The length of our coastline and the need to have an administration close to the public means the construction of administrative buildings specially adapted to the task in the towns housing "Quartiers Maritimes" (Maritime Headquarters).

The Quartier Maritime at Tangier is nearing completion. It is only intended to add one new project to the Plan, the Quartier Maritime at Nador. This operation will not require fresh earmarked credits. In fact, it replaces the construction of a Q.M at Al Hoceima which is less urgent and has so far had no credit earmarked.

II. — FISHERY INSTITUTE

Credits opened for the year 1964 should allow us finally to complete the substructure for such an Institute. No extension of the organisation is proposed during the Plan.

III. — LIFE-SAVING AND SUPERVISION OF FISHERIES

As regards the supervision of fishing and navigation it has often been pointed out that our natural resources require an effective system of supervision to prevent the spoiling of such resources.

Moreover the safeguarding of human life at sea and the need to observe security regulations must be taken into account under the best conditions.

We must therefore furnish our seaboard with a proper system of supervision. Fast coastguard vessels and life-boats must satisfy these requirements. Later on helicopters may be used.

The Department will use the earmarked credit opened previously and consolidated in the Finance Law for 1965 to build two life-boats which could also be used as coastguard vessels (one at Agadir and one in the northern zone).

Credits 1965	Credits 1966	Credits 1967
1,150,000	»	»

IV. — OYSTER-BEDS

The oyster-beds in the Oualidia and Sidi Moussa lagoons are a new industry in Morocco.

But this industry still depends on foreign countries for seed-oysters; 317 tons having been imported from Portugal in 1963 and 1964 to a value of 225,000 DH.

Nevertheless there is a natural deposit at Larache which should make it possible to supply nurseries for seed-oysters and make the industry purely Moroccan, thus saving foreign currency. On its own, this deposit only offers restricted possibilities owing to its unfavourable topographic conditions (especially the lack of hard salts in the river Loukos, where it has its source).

This action could be reinforced by:

1) A course of stone bedding in the river Loukos and along its banks where conditions are favourable (100-200 m^3 of rock approximately).

2) By immersing in this bedding a few thousand tons of adult oysters from southern Europe.

2) Such work, which would undoubtedly be in the general interest, can only be carried out with a State subsidy of about 30,000 DH spread out over three years.

Thus the following credits should be noted under the equipment budget:

1965 credits	1966 credits	1967 credits
10,000 DH	10,000 DH	10,000 DH

V. — NAVAL SCHOOLS AND TRAINING-SHIP

In this respect much has still to be done to give technical training to our crews.

Two tasks have been undertaken and should be continued:

1) The creation of Naval Apprentice Schools at Larache, Safi or Agadir would enable us to complete the schooling of technical pupils.

Two tasks have been undertaken which we should pursue:

2) The ordering of a training-ship will train future officers of the Moroccan navy and masters of ocean-going fishing vessels.

This unit can be used rationally by placing it at the disposal of the Merchant Navy Officers' School and the three apprentices' schools.

It should be noted that the training-ship cannot be replaced by the use of a vessel belonging to one of the Moroccan companies since the tonnage and equipment of available ships do not correspond.

Under these conditions and in view of the priority accorded to the training of personnel by the Plan, it does not seem that we can postpone the application of the credit for this scheme. At the same time it is intended to apply for foreign aid and in this case a portion of the credit could be cancelled.

VI. — DEVEOPMENT OF THE CONSUMPTION OF FISH

It is absolutely essential to develop the consumption of fish with its high protein content. On an average Moroccans consume 1.2 kg. of fish per year. This figure could and must be doubled.

A study of the question has shown that for this purpose it will be necessary to stimulate private enterprise which is lacking and, if need be, to create an organisation at national level able to act as follows:

- Purchase fish in bulk
- Transport it to the interior
- Store it where necessary

— Retail fish in local markets

— Carry out the necessary publicity work to create a demand.

The necessary credits would be relatively modest for the following reasons:

a) There is already a semi-official body, the "Comptoir du Poisson Industriel", which is familiar with all the problems and whose staff might be able to help found a new organisation.

b) The F.A.O, through its delegate in Morocco, has always been interested in any effort made to improve fish consumption in this country. It wounld be prepared to give any new body all the financial and material aid that might be required.

VII. — MODERNISATION AND RECONVERSION OF THE FISHING FLEET

The Merchant Navy and Fisheires Department has for a long time been attempting to stimulate tunny-fishing, which would provide a supplementary raw material for the canning industry.

The following solution has been adopted in consultation with the BNDE and the BEPI:

1) The BEPI has chartered a tunny-fishing vessel for the year 1965 which will fish for tunny on the high seas.

2) The campaign will be strictly controlled by the Fishery Institute.

3) The chartering of this vessel will cost about 100,000 DH. Naturally the amount of profit from fishing will be deducted from the charter price.

4) In the light of the results obtained at the end of the season, the Fishery Institute will draw up a complete report on tunny-fishing (type of vessel, fishing banks according to season etc.).

This campaign, the principle of which was finally admitted in August 1964, will take place from 1st. September 19964 to 1st. September 1965 with the assistance of the foreigner owner of a tunny-fishing vessel.

If results are favourable one or more working companies may be formed.

If the scheme is successful we should favour the construction or purchase of suitable units by Moroccan owners.

The financing of the high-seas fishing fleet will have to be by foreign supplier credit (public or private) on a long-term basis as well as long-term local credits. All these credits will obtain an interest rebate granted by the State.

VIII. — SHIP-BUILDING

It is obvious that Morocco must have a merchant fleet able to cope with an important part of its exports and imports.

Legislation issued in September 1962 showed that the Government itself is thinking along these lines.

The basic question, whether or not Morocco is to have a suitable fleet, is therefore decided.

It cannot be emphasised too strongly that recourse to foreign shipping is a heavy burden on our balance of payments and that each ton of goods not carried under the Moroccan flag represents a tithe to foreign companies.

The use of foreign vessels costs the State more than 200,000,000 DH, which is a constant drain on our currency reserves.

Despite the great efforts made by the Société d'Economie Mixte, the Compagnie Marocaine de Navigation (COMANAV), the Moroccan fleet at present only comprises 27 cargo vessels with an overall draft of 50,000 tons representing 80,000 tons deadweight.

The effective participation of this fleet in the transport of imported or exported goods scarcely exceeds 3%.

Nevertheless, small as it is, freight charges paid to Moroccan ships come to more than 20,000,000 DH, which shows what could be done with a larger fleet.

All great nations have perfectly well understood the need to be independent of foreign shipping. It is sufficient to compare the insignificant contribution of the Moroccan fleet to that of about 50% prevailing in great countries like France, which even so are not specifically maritime powers.

This is why recent legislation has made it a policy to develop Morocco's merchant navy and this policy has already been begun by financial and tariff measures (see Dahir of 31.12.60).

(For financing see final paragraph of preceding Section VII)

⁂

RECAPITULATION

	1965	1966	1967	Total
I. - Admin. substructure	» (1)	»	»	»
II. - Fishery Institute	»	»	»	»
III. - Life-saving and supervision	1.150.000	»	»	1.150.000
IV. - Oysters	10.000	10.000	10.000	30.000
Total I - IV ..	1.160.000	10.000	10.000	1.180.000
as an indication:				
V. - Naval school and training-ship (2)	(2)	810.000	1.000.000	1.810.000
VI. - Development of fish consumption	»	»	»	»
VII. - Modernisation etc. of fleet	»	»	»	»
VIII. - Ship--building development	»	»	»	»
Total I - VIII..	1.160.000	820.000	1.010.000	2.990.000

---

(1) The "Quartier Maritime" project for Nador has placed that of Al Hoceima and will be financed by drawing on the credits carried forward from previous years, amounting to 260,000 DH.

(2) Work on this project in 1965 will be financed up to 1,084,000 DH by using credits carried forward.

CHAPTER VII

I. – **Primary education**

II. – **Youth and Sports**

III. – **Social work**

I. – PRIMARY EDUCATION

I. – **The present situation**

II. – **The Three-year period**

III. – **Requirements**

IV. – **Children without education, children leaving the intermediate grade**

Primary education

I. — THE PRESENT SITUATION

The three-year period showed a great effort towards providing education at primary level and considerable investments were made (nearly 100 million DH). Running costs were also considerably higher owing to massive recruitment of teachers.

The doctrine of the Ministry is as follows: a training programme based on four principles:

Spread of education
Arabisation
Unification
Moroccanisation and training.

As regards the last point we should refer to Chapter III above since this only concerns teaching and administrative staff and not children to be educated.

1° Spread of education

The FIVE YEAR PLAN PERIOD was notable for:

— Adoption of an educational policy for providing mass education leading to a rapid reduction in the rate of illiteracy.

— Priority to be given to providing education for children of 7.

October 1959	Education provided for	728,000
1964	»	1,100,000

The success of the mass education policy led the Government to announce compulsory education by gradual stages. Thus every child, whatever its sex or aptitude, has a right to elementary education (the "Three R's").

2°) Arabisation

After independence pupils were being taught in Arabic for hours a week out of 30. The Five Year Plan period began Arabisation of the primary stage.

- — Two courses were completely arabised : the C.P. and the C.E.I.
- — In the other courses the timetable was set at 15 hours Arabic and 15 hours French.

The French periods were distributed as follows :

- — 9 1/2 hours language (writing, spelling grammar etc.).
- — 3 3/4 hrs. arithmetic.
- — 1/2 hr drawing.

We should add half the total time for recreation : 1 1/4 hrs.

Thus over the five-year period arithmetic was taught in a foreign language to C.E. II, C.M.I. and C.M. II.

Structure

CE.I.	30 hrs. Arabic
C.E. II	20 hrs. Arabic + 10 hrs. French
C.M. I	20 hrs. Arabic + 10 hrs. French
C.M. II	20 hrs. Arabic + 10 hrs. French

3°) Unification

There was considerable progress during 1960-64 :

— gradual reduction of primary classes of the European type, classes modelled on the French system (30 hrs.) :

October 1969	700 classes
October 1962	360 classes

i.e.15,629 pupils, 11,500 of which were Moroccans.

— integration of the Jewish Alliance Israélite schools (European type with teaching in Hebrew).

October 1960 : 261 classes taken over by the M.E.N. (payment of teachers and running costs).

The other classes were dependent on a private organisation (The Ittihad Maroc replacing the Alliance), which received a subsidy from the Government.

January 1963 : integration of Ittihad teachers in the public teaching system.

- — Introduction of Moroccan type teaching.
- — Gradual integration of private teaching.
- — Control of establishments.
- — Control of teaching methods.
- — Unification of examinations.
- — In October 1962, 410 teachers out of 1100 were taken over by the Ministry.

II. — THE THREE-YEAR PLAN PERIOD

1°) Spread of education

- Continuation of the mass education policy.
- Gradual extension of the scheme to children of 5-6 years, which will give better results than those obtainable under the Five-Year Plan.

2°) Arabisation

The Three Year Plan will see the complete Arabisation of primary education.

— Courses completely arabised :

October 1964 : CP - CE I - CE II ;
October 1965 : CE I - CE II - CM I ;
October 1966 : CE I - CE II - CM I - CM II.

Thus Arabic becomes the teaching medium and in addition a foreign language is taught as from second year elementary.

3°) Unification

— As from October 1964 introduction in all State schools of the same teaching system.

Hence :

- Suppression of the last primary classes of European type.
- Unification of examinations.

Whereas the Three Year Plan continues the effort for unification, it has a new angle as regards private education which will be encouraged and be given more freedom in order to ease the burden on the State.

Teaching structure proposed during the period

C.E. I	30 hrs. Arabic
C.E. II	20 hrs. Arabic + 10 hrs. French
C.M. I	20 hrs. Arabic + 10 hrs. French
C.M. II	20 hrs. Arabic + 10 hrs. French

III. — REQUIREMENTS

1° Reminder of the aims of the Five-Year Plan

1°) Spread of education

During the Three Year period the policy of mass education will be maintained and accentuated according to the law on compulsory education.

ARABISATION OF THE WHOLE OF PRIMARY EDUCATION

The last two subjets taught in a foreign language will be arabised as from Oct. 1964 :

1964 .... in the CE II
1965 .... in the CM I
1966 .... in the CM II

The foreign language will be studied as from the CE II for 10 hrs. per week.

MOROCCANISATION

In primary education this will be complete at the end of the Three Year Plan.

INTRODUCTION OF ELEMENTARY RURAL TRAINING

Primary education must not only prepare pupils for secondary school.

Some pupils will only receive this kind of teaching. Therefore primary timetables must try to ensure some practical training, especially elementary knowledge of agriculture and agricultural engineering.

RAISING THE STANDARD OF TEACHERS

The Three Year Plan aims at this by :

— Removal of unsatisfactory teachers.
— Raising the intellectual and professional level of teachers.

REFORM OF PRIMARY EDUCATION

I. Aims

During the three-year period the objectives will be threefold :

— extension of mass education by reaching children between 5 and 6 ;
— extension of the duration of schooling : 7 years instead of 4 1/2, thus raising the level of education ;

— creation of a national primary system taking into account the traditions of the country and of Arab and Islamic values while adapting the pupil to the modern world and to modern techniques.

III Reforms contemplated

a) Creation of a first cycle in a communal school with three years of study for children of 5, 6 and 7.

The premises and the staff will be entirely the responsibility of the communes.

The programmes, the timetables and control of teaching will come under the Ministry.

Teaching will be in Arabic.

b) After the first communal cycle pupils will enter the second cycle or primary cycle coming under the Ministry.

This cycle will comprise 4 years of study :

CE I - CE II - CM I - CM II.

Teaching will be wholly in Arabic and a foreign language will be studied as well.

Thus, after a preparatory cycle of three years pupils will be able to pursue studies at a higher level which will prepare them better for secondary and higher education.

III. — Aspects of primary education during the Three Year period
First communal cycle

— gradual creation of this sector starting with age-groups and 7 and 6.

1955 - 66 :

— opening of the third year which will include age-groups 7 and 6, that is about 600,000 pupils.

1966 - 67 :

— opening of the second year which will include age-groups 5 and 6, again about 600,000 pupils ;

— maintenance of the third year which will receive children of 7, about 300,000 (old pupils).

1967 - 68 :

— final setting up of the system ;

— first year : children of 5 (about 300,000 new pupils) ;

— second year : children of 6 (about 300,000 old pupils) ;

— third year : children of 7 (again about 300,000 old pupils).

Primary cycle

a) Table of education provided

	1965	1966	1967
C.E. I.	242.960	300.360	302.400
C.E. II.	217.470	230.574	277.391
C.M. I.	175.421	191.663	204.347
C.M. II. ...	200.917	203.161	215.429

b) Technical study of schooling

— The attached table shows the development of schooling during the period.

Indications necessary for an understanding of the table :

$\boxed{237,000}$: numbers per school year ;

→ : number repeating ;

→ : number of pupils moving from one form the another ;

↓ : number of pupils giving up schooling.

Calculation of the school pyramid

a) Pupils repeating : CE I .... 18 %
CE II .... 20 %
CM I .... 20 %
CM II .... 40 %

b) Pupils giving up : CE I .... 5 %
CE II .... 8 %
CM I .... 12 %

N.B. — These bases of calculation are severe. Any modification during the Plan will be for the better.

c) The school pyramid

(see attached appendix)

This pyramid also takes into account :

— suppression of preparatory courses ;
— increase in numbers from the communal sector ;
— existing premises ;
— the number of available teachers.

IV. — Cost of primary education after the reform

FIRST COMMUNAL CYCLE

This is the responsibility of the communes. Building and staff are paid for out of communal funds.

THE PRIMARY CYCLE

— No expenditure either on staff or equipment,
— on the contrary, there is an opportunity to give further training to teachers.

However the completion of current operations, authorised under the Five Year Plan, requires a credit of 8,000,000 DH in 1965. Moreover material credits will be required in order to keep the schools running.

⁂

FIRST DEGREE TEACHING

Teachers - Courses - Premises

COURSES	1964 - 1965			1965 - 1966			1966 - 1967			1967 - 1968		
	Teachers	Courses	Premises	Teachers	Courses	Premises	Teachers	Courses	Premises	Teachers	Courses	Premises
C.P.	4.930	6.574	4.931									
C.E. I.	5.761	5.761	10.633	6.074	6.074		7.509	7.509		7.560	7.560	
C.E. II. ...	5.274	5.274		5.877	5.877		6.231	6.231		7.497	7.497	
C.M. I.	4.718	4.718		4.741	4.741		5.180	5.180		5.522	5.522	
C.M. II. ...	5.465	5.465	3.826	5.581	5.581		5.643	5.643		5.984	5.984	
Principals .	1.075			1.075			1.075			1.075		
Total	27.223	27.792	19.390	23.348	22.273	19.390	25.638	24.563	19.390	27.638	26.563	19.390

IV. — CHILDREN NOT RECEIVING EDUCATION, CHILDREN LEAVING THE MEDIUM COURSE

The Plan only considers schooling in the normal sector, children of 7.

Two problems remain unsolved :

- those of children not receiving education ;
- children leaving school at the level of medium grade II.

Children not receiving education

A serious problem is created by the existence of thousands of illiterate children who are handicapped and a loss to the country.

This may happen for various reasons :

- children who are too old ;
- lack of room in the schools ;
- lack of interest on the part of parents ;
- children of nomads.

Suggested solutions

Division into three categories by age groups :

- children of 8 years old ;
- children of 8-11 ;
- children of 12-14.

a) Children of 8 :

These will be given priority admission in normal sectors subject to places being available.

b) Children from 8 to 11 :

These could be handed over to a complementary sector, whose task would be made easier by the following factors :

- a lesser number of potential pupils ;
- assistance which could be given by teachers from normal sectors ;
- by using instructors from the normal sector who would be gradually replaced by regular teachers ;
- by using full-time certain available accommodation, barracks, public buildings etc. ;
- by a timetable reduced to essential subjects, representing an elementary education of three years (religious instruction, reading, writing and arithmetic), entirely in Arabic.

This three-year course could be completed by a two-year instruction in a trade leading to a school of apprentices.

c) **Children over 12 years :**

These will have to be taken charge of by Basic Education, comprinsing illiterate adults and adolescents.

The programme would also be that of Basic Education :

- literacy ;
- Civics ;
- practical everyday knowledge ;
- training in a school of apprentices.

Children leaving school at the level of the intermediate grade Ind. Year

Characteristics of this category :

1° - there are two groups :

- those with a CEP (80 %) ;
- those leaving without any certificate (20 %).

This latter group, as well as through-outs from primary, can be considered as an inevitable loss and are of no interest to this survey. We shall only consider the first group.

2° - age :

14 to 16 since the age required for entry into the working world is 18.

3° - numbers :

The number will increase owing to mass education. During the three-year period about 50,000 pupils a year, holding the CEP, aged from o14 to 17, will leave school without being immediately employed.

Utilisation of this group before they start work

Employment raises three basic problems :

- preparation for employment ;
- choice of employment ;
- control of preparation for employment.

PREPARATION FOR EMPLOYMENT

Technical progres has profoundly affected working conditions. Basic knowledge is more and more necessary as well as technical knowledge which makes up a kind of general training.

This comprises three phases :

— a) : family education from birth to 7 years (environment, language, habits)

— b) : entry to primary school from 7 to 14 (basic knowledge)

— c) : introduction to the working world.

These three phases together constitute preparation for employment.

How can this be achieved ?

— phase b) : at school (CEP) ;

— phase c) : professional training.

Such training cannot be provided by the Ministry of Education.

A solution must therefore be found.

Suggested solution :

— TECHNICALLY : apprenticeship for children.

— LEGALLY : freedom or obligation ?

I. — Technical aspects of the problem

In a developing country we must opt for a "dirigiste" policy of compulsory apprenticeship.

Oragisation of apprenticeship :

The economic structure of the country can be divided into three :

— small and medium undertakings
— large undertakings and public administration
} for sectors other than agriculture

— agriculture

The conditions for organising apprenticeship in each group will differ.

A. — Small and medium undertakings :

Heads of undertakings will have to train a number of apprentices fixed by legislation from adolescents between 14 and 17. This is usually called "on-the-job" training.

B. — **Apprenticeship in large undertakings and public administration**

Creation of compulsory apprentice centres belonging to the undertakins. The list will be fixed by law. This is collective training.

C. — **Agriculture :**

It is difficult to provide for apprenticeship here, since there is no dynamic private sector. Nevestheless, since this a priority sector, a special study will gave to be made.

In fact :

- — expansion of agriculture ;
- — increased output ;
- — improvement of farmers' living conditions ;
- — in short the economic development of rural areas determines the raising of the professional level of the peasants.

It is this sector to which most children should be steered who leave school in second year with a CEP.

Advantage of this operation :

- — primary education plus after-school agricultural training will help us to expand and modernise under supervision ;
- — all agrarian reform is conditioned by an understanding of agricultural problems by the peasantry ;
- — the extra profits obtained by improved output as a result of this operation would largely pay for extra tuition.

Means of action :

- — training of agricultural instructors who will move about the country, recruited at agricultural CAP level (MEN) ;
- — training of technicians to spread knowledge, recruited from the technical schools of the Ministry of Agriculture ;
- — use of agricultural instructors and technicians ;
- — gathering of pupils at certain times in schools or other public buildings.
- — Organisation of agricultural engineering courses (night-schools in intermediate industrial colleges throughout the country).

Means of application

- — Advantage of rational co-ordination
- — Census of CEP holders in rural areas

- — The list to be lodged with the Provincial delegate.
- — List of agricultural instructors etc. and available buildings to be lodged at provincial offices.
- — A mixed commission (provincial pre-employment commission) comprising the ministries of Education, Agriculture, Labour and professional groups under the authority of the Governor which would prepare each year a plan for after-school education in agriculture.

In any case the establishment of such after-school training or collective apprenticeship requires thorough study if we agree on the principle of using in the agricultural sector pupils who leave the medium grade in second year.

Remark : As regards the irrigated areas of the ONI and the ONMR or experimental areas, compulsory apprenticeship can be introduced for pupils leaving the primary cycle.

II. — Legal aspect

Relations between master and apprentice will be based on an apprentice's contract.

Contract

Object : Provision of professional training and not labour.

a. - Formal conditions

- — A written contract to be drawn up in legal form
- — Conditions of admission (character).

b - Practical conditions

- — Obligation on the master : training in the trade, paternal conduct, payment of a provisional wage.
- — Obligation on the apprentice : Fidelity, obedience, respect.

c. - End of contract

The duration of the contract of apprenticeship is obliged to take an examination set by the competent administrative authority.

The apprentice receive a C.A.P. certificate which is at once entered with the Labour Exchange under the right heading (trained labourer).

CHOICE OF EMPLOYMENT

Assumption : The pupil does not choose his trade ; it is chosen for him, which is what the system is for.

Orientation

Choice of employment by the apprentice must be made through the trade orientation service. At second-year level all pupils will be tested psychologically and physiologically. They will then be channelled to the various workshops or apprentice centres.

b) Orientation towards a trade, an instrument of planning.

The "centres d'orientation professionnelle" must know the requirements of the province and steer labour accordingly.

The labour exchanges must have a list of apprentices available in the province.

A provincial pre-employment commission will decide where to post an apprentice in an undertaking. It will consist of representatives of the various ministries, the labour exchange and the undertaking in question.

c) Organisation of professional orientation

— Creation of " centres d'orientation professionnelle " in each province.

Recruitment of officers through a training centre for the latter.

CONTROL OF PREPARATION FOR EMPLOYMENT

A. — Control of engagement

The labour market must be organised supply and demand connot be left to private initiative.

— Firms may not take on personnel direct.

— They must go through the labour exchange.

hence : Labour exchanges must be extended.

There will be two sorts of labour exchange :

— Secondary exchanges for large centres

— One main office per province to co-ordinate the others.

B. — The task of the labour exchanges

Generally speaking they must organise the placing of unemployed, centralise supply and demand etc.

As regards pre-employment, they must place apprentices and keep an up-to-date list of apprenticeship centres and vacancies in small firms.

C. — Control of apprenticeship

The professional training of the apprentice inside the firm will be controlled by a corps of specialised inspectors.

Remark :

The Secretary for Training is the only person able to ensure the necessary co-ordination. He will have to make surveys in order to form a policy.

II. – Youth and Sports

During the Five Year Plan it was not possible to define exactly the mission of the Youth and Sports Department or to lay down a policy.

The three-year period must be a period of study and reflexion.

This does not mean that the department will have no means of action during 1965-67.

In the first place daily action is the fruit of the action of each officer in the department and of a judicious use of credits.

Moreover Chapter III analyses existing possibilities as regards the problem of training educationalists in this Department.

In fact, in a period when the State must confine its expenditure to directly productive activities, citizens must take the initiative.

Thus 4,800,000 DH have been earmarked for the whole three year period to solve problems connected with juvenile delinquency, setting up of camps and reception centres etc.

III. – Social work

I. – Public Health

II. – Rural and town planning

I. – Public Health

The Public Health Dept.'s expenditure has been rising considerably and irregularly for several years. The reasons are as follows :

- Increase in population (400,000 a year)
- increased awareness on the part of the population of the benefits offered
- The huge percentage of persons completely dependent on the Dept. owing to poverty.

The problem of the Ministry of Health is not only to achieve a decent protection for the population but to maintain it in spite of increased demand.

I. — THE RESULTS OF THE FIVE YEAR PLAN AND THE PRESENT SITUATION :

The achievements of the Five Year Plan were based as follows :

- Priority to preventive medicine for the first two years - 1961 and 1962.
- A pause in hospital equipment, which resumed activity in 1963.
- Professional training at all levels.

a) Prevention

This scheme could not be carried out in its entirety.
It was intended to achieve at the end of the Plan :

- 1 health centre per 45,000 people
- 1 dispensary for 15,000 people.

(In rural areas this is often one and the same thing).

At the outset of the Three Year Plan number of preventive centres was 672 (constructed or improved) :

— Urban Health Centres (CSU)	56
— Urban dispensaries (DU)	109
— Rural Health Centres (DR)	393

In rural areas this represents one medical station per 27,000 people and 30,000 in towns.

It should be mentioned that lack of accommodation prevents adequate staffing.

Apart from general considerations this situation is especially dangerous in view of infectious diseases such as malaria, T.B., syphilis and eye diseases.

Morocco's obligations to international organisations make the problem more acute.

b) **Cure**

This must be in two instalments :

— As an urgent task in 1960-1961, 1962 it was to modernise certain hospitals, to complete those building, to rebuild Agadir Hospital and to extend TB centres to all provinces.

This meant providing 2900 beds in all.

It was also intended to modernise finally a new section of the Military Hospitals which could be handed over to the Ministry before the end of the Plan.

— The second urgent task was (1963-64), in the event of staff being adequate, to add 1800 new beds.

Thus capacity in hospitals would have reached 18,000 beds in 1960 and 22,800 beds in 1964. This would mean 19 beds per 10,000 inhabitants and sufficient to cover the rising birthrate.

At the outset of the Three Year Plan the situation was as follows :

	Number of beds	Number per 10,000
— General hospitals	11,199	9.34
— TB hospitals	3158	2.52
— Psychiatric hospitals ...	1108	0.86
— Rural hospitals	1756	1.4
— Leprosy hospitals	197	0.16
— Re-education hospitals ..	290	0.23
— Asylums	2100	1.68
	19.808	15.8

Compared with 1960 there is a slight regression in beds per 10,000 (16.2 in 1960 - 15.8 in 1964).

II. — SATISFACTION OF NEEDS

Besides the struggle against disease, apart from hospital equipment, other less expensive but efficient methods are needed.

This explains the preventive medicine scheme in the Five Year Plan.

The norms for 1960 are still in valid, that is one health centre per 45,000 and one dispensary per 15,000. either in town or country. This helps to break the vicious circle " unhealthy environment - bad health - disease - poverty ".

The idea is that the dispensaries should give treatment the hospitals cannot provide or continue treatment prescribed there. They must also help the inhabitants to help themselves. Such action can only bear fruit if there is adequate staff used to team-work, also sufficiently mobile to get to know the inhabitants and the different areas.

This is the task of the Training Programme, one of the main objectives of the Three Year Plan.

In principle the health centres allow for consultation. They supervise the work of the dispensaries. In the towns the health centre has three dependent dispensaries. The area is referred to as " Circonscription Sanitaire ".

In the country the health centre is itself more of a dispensary. We should have on rural health centre (CSR) for two rural dispensaries (DR). The Three Year Plan allows for one CSR per 75,000 in view of the difficulty in finding accommodation for staff.

It is essential to realise that an urban dispensary dealing with more than 15,000 would not be able to do its job. This is an absolute norm. On the basis of a population of 13,875,000 in 1967 and of existing establishments we should build :

— 26 urban health centres (CSU)

— 137 urban dispensaries (DU)

— 148 DR's.

10 Health Dept. laboratories will be needed and accommodation must be provided for the CSR and DH, that is 400 dwellings to be added to those included for the CSR (5) and the DR (3) under the Three Year Plan. In fact the Five Year Plan only provided for 3 dwellings although 4 officers have to live in the sector.

To this building programme we must add 5 School and University Hygiene Centres (CHSU) and modernise an Ophtalmic Diagnosis Centre (CDO).

These activities must be supported by the National Institute for National Health and Professional Training (INSP and FP) and by a laboratory for control of drugs.

III. — FINANCIAL LIMITATIONS

Under the present system by which medical service and drugs are practically free the Health Dept. is faced with greatly increased expenditure. Investment in equipment has also risen :

Year	Total State Equipment Budget	Credits to Health Dept.	%
1955	306.455.470	20.990.000	6,6
1958	367.390.640	9.735.000	2,4
1961	451.333.500	12.990.000	2,6
1964	818.666.358	23.115.000	2,8

Owing to financial limitations only the following credits can be allowed for the Three Year Plan :

Three Year Plan programme	1965	1966	1967	TOTAL
Prevention	6.830.600	1.596.600	1.596.600	10.023.800
Cure	15.650.000	8.250.000	2.910.000	26.810.000
Transport	565.000	300.000	300.000	1.165.000
Social evils	1.000.000	3.000.000	5.000.000	10.000.000
Total	25.045.600	13.146.600	9.806.600	47.998.800

These figures show the danger of regression in the face of birthrate and increased demand.

Even the necessary pause in equipment programmes will, if continued, raise many problems. It will make us question the matter of free services and the conditions under which equipment is granted to the areas concerned. However there are many interesting solutions at local level.

In any case the mobility of personnel must be tackled without delay.

Nothing can be done in rural areas without daily travel on the part of the staff and transport will have to be given them (bicycles, cars, even mules in mountainous districts).

It is also hard to recruit high-grade staff in outlying and destitute districts.

An allocation of 10 million DH has been made towards the fight against malaria, TB, syphilis and trachoma.

This programme will enable us to :

— Complete the substructure in the countryside for priority provinces which are affected by malaria and equipment will be used against all infectious diseases.

— To finish some urban health centres, still remaining within present financial limits. Nevertheless this activity in rural areas will be a further burden on operating costs.

Thus the use of this provisional grant will have to be decided on in each case.

IV. — PROBLEMS OF TRAINING AND RECRUITMENT

a) Training

This is still a basic and priority requirement which will affect the success or failure of preventive and hospital services under the Three Year Plan.

The means at the disposal of the Professional Training Dept. under the Ministry of Health (4-degree schools) are quite sufficient to train the necessary personnel. 2000 pupils will have to be trained each year to meet the requirements of the Public Health Dept. during the Plan.

b) Recruitment of Moroccan doctors

At present there are 572 Public Health doctors. Only 100 are Moroccans more that half of which carry out their compulsory public service lasting two years. Among these a certain number may unfortunately move to the more lucrative field of private practice.

14 Moroccan holders of diplomas left the Faculty or Medicine in June 1964. The following is the outlook for the future :

— 7 in 1965
— 45 in 1966
— 50 in 1967.

We shall have to wait until 1970 before Moroccans can take over from foreign doctors.

V. — THE THREE YEAR PLAN

a) Prevention

The three-year programme will only allow for the construction of :

— 4 Urban Health Centres
— 3 Rural Health Centres
— 17 Urban Dispensaries
— 26 Rural Dispensaries.

b) Cure

The credits provided for under the Three Year Plan represent practically speaking the consolidation of credits already earmarked. They will only enable us to open :

— 1560 beds for general hospitals.
— 1050 beds for lung diseases
— 180 beds for rural hospitals.

Tableau I

REPARTITION PAR PROVINCES ET PREFECTURES DES FORMATIONS DE PREVENTION A CONSTRUIRE EN 1965 - 1966 - 1967

	C.S.U.			D.U.			C.S.R.			D.R.		
	1965	1966	1967	1965	1966	1967	1965	1966	1967	1965	1966	
AGADIR											1	1
MARRAKECH				2	1					2	1	
OUARZAZATE												1
CASABLANCA-Province				1					1	2	1	1
BENI-MELLAL										1		1
RABAT-Province								1		1	7	
MEKNES						1						
KSAR-ES-SOUK										1	1	
FES	1			1	1	1						1
TAZA										1	1	1
AL HOCEIMA										1		
OUJDA				1	1	1						1
NADOR							1			2	1	
TETOUAN			1			1				1	1	
TANGER		1		1	1							
CASABLANCA-Préfecture	1											
RABAT-Préfecture				3								
TOTAUX	2	1	1	9	4	4	1	1	1	12		7

Tableau II

PLAN TRIENNAL

CREDITS RESERVES POUR LA CONSTRUCTION D'HOPITAUX

Provinces	VENTILATION DES CREDITS			
	C.P. 1965	C.E. 1966	C.E. 1967	TOTAL
Agadir	1.200.000	1.500.000	300.000	3.000.000
Marrakech	1.070.000	—	—	1.070.000
Tétouan	2.050.000	670.000	50.000	2.770.000
Alhucemas	900.000	700.000	60.000	1.660.000
Fès	1.730.000	680.000	—	2.410.000
Béni-Mellal	300.000	150.000	—	450.000
Ouarzazate	300.000	1.000.000	1.200.000	2.500.000
Ksar-es-Souk	400.000	600.000	800.000	1.800.000
Casablanca-Préfecture	500.000	—	—	500.000
Casablanca-Province	400.000	100.000	—	500.000
Meknès	350.000	—	—	350.000
Rabat-Préfecture ..	1.300.000	400.000	100.000	1.800.000
Rabat-Province ...	1.950.000	2.000.000	400.000	4.350.000
Oujda	1.350.000	450.000	—	1.800.000
Equipement	1.850.000	—	—	1.850.000
Totaux	15.650.000	8.250.000	2.910.000	26.810.000

Tableau III

LOI DES CADRES SOUHAITABLE EN FIN DE PROGRAMME TRIENNAL
ET EFFECTIFS REELS

	Médecins	Pharmaciens	Dentistes	Ingénieurs sanitaires	Ingénieurs statisticiens	Personnel para-médical	Aides sanitaires	Personnel administratif	Personnel de service	TOTAUX
Normes de la prévention	375	21	32	19	5	3.786	2.936	435	1.236	8.845
Normes des hôpitaux	325	30	—	—	—	2.534	2.316	479	5.500	11.211
Total	727	51	32	19	5	6.320	5.252	914	6.736	20.056
Existants	572	34	—	1	1	3.125	3.861	662	5.865	14.121
Postes à pourvoir	155	17	32	18	4	3.195	1.391	252	871	5.935

PERSONNEL REQUIRED AT THE END OF THE THREE YEAR PLAN AND ACTUAL NUMBERS

GLOSSARY

"postes à pourvoir" = posts to be provided for

"médecins" = doctors

"pharmaciens" = chemists

II. — Town and country planning

A. — TOWN PLANNING - HOUSING

In order to meet the requirements of the poorer classes the State has to make up for the inadequacy of private entreprise. The main object is to fight against the growth of shanty-towns (" bidonvilles ") and congestion in the Arab quarters (médinas). For the last 20 years the following methods have been used :

1° Laying out of land for housing estates to be resold without profit to the inhabitants of shanty-towns who are able to build on their own or with a loan from the Banque Populaire when they can show sufficient solvency.

2° Construction of rentable housing in a few large towns where the demand is certain.

3° Construction of "Trames Sanitaires Améliorées" (TSA) that is to say temporary houses with one room and WC, water supply and drainage. The rent will be 12 DH per month.

4° Fitting out of TSA with collective sanitary arrangements for the insolvent. Improvement of the remaining shanty-towns.

Shortage of cash obliges the State to abandon new programmes for collective housing, although they are certainly very helpful, since the Three Year Plan only provides for completion of work on hand. There remain the housing estates and the TSA, on which we give the following data :

I. — Estates

The main effort will be towards the lay-out of land. Thsi is given priority since in big towns 15 % of heads of families want to build a decent house if a flexible credit system is available.

The Plan provides for an investment of 22.10 million DH to fit out 220 hectares representing about 8800 lots.

Success is conditioned by a simplification of the credit procedure by the Banque Populaire. The branches of the bank will have to lend about 88 million DH at the rate of 10,000 DH for each lot-holder.

II. — TSA

This type of accommodation is essentially temporary. The State remains the owner of the land, so that it may be able later on to set up, in place of these temporary houses, estates with individual lots or collective buildings.

The extension of this type of building to the towns cannot exceed certain limits without creating large populated areas of a semi-permanent type for an indefinite period as well as heavy maintenance expenses for accommodation which is even so inadequate. Thus the Plan provides for 4500 temporary houses over 3 years for an investment of 13.50 million DH.

This is the programme :

Estates	22,100,000 DH
TSA	13,500,000 DH
Rentable houses	5,400,000 DH
Cost of surveys etc.	9,000,000 DH
	50,000,000 DH

Annual distribution would be more or less as follows :

1965	20 million DH
1966	15 »
1967	15 »

Owing to the modest assets of the Plan the Housing Department can only operate in large towns. We must remember that 50 million DH represents the annual credit allocated to the Department before 1962. Thus it is likely that the Department will not be able to chek the growth of bidonvilles in towns where this is mainly caused by an exodus from the country. 600,000 people now live in bidonvilles, i.e about 150,000 families. Action by the Housing Dept. would only give 4500 families TSA accommodation, 18,000 at the most housing estates (counting two families per house) and 540 families rentable accommodation, that is to say a maximum of 22,000 families. This shows the alarming situation when the Dept. slows down to 1/3 of its normal activity.

Of course outside large towns like Casablanca, Fez etc., where the problem is particularly acute, nothing can be done for towns of medium importance or in the countryside. Nor can anything be done to house civil servants, where other means will have to be found.

B. — RURAL PLANNING

The State will undertake the gradual completion of water-supply, electrification etc. in centres other than the 73 "urban communes". The most pressing needs have already been recorded. By taking into account this estimate as well as available funds overall investment for each category has been laid down for 1965-67 :

Water supply	18,000,000 DH
Various services	2,110,000 DH
Electrification	12,000,000 DH

The break-down of these total sums among the provinces and the choice of operation in each province require technical and economic surveys the results of which are not yet known.

The content of the programme cannot be stated in its entirety. Nevertheless we indicate here the programme for water supply and general improvements.

I. — Water supply :

New supplies or reinforcement of existing systems would be organised as follows :

- — tourist centres between Ceuta and Martil ;
- — modernisation of the Fouarat plans ;
- — completion of the new supply at Safi ;
- — Fresh supply for Oued Zem ;
- — Fresh supply for Khouribga etc.

Apart from this four small centres each year would receive water.

Finally the State will be called upon to help strengthen the equipment provided for by the R.E.I. (Régie d'Exploitations Industrielles) in the latter's centres, such contribution amounting to about 4 million DH.

2. — General improvements :

Only work of prime urgency has been condered., i.e. :

— Work on the Oued Mellah : completion of the first section.

— Protection of Khenichet and other riverside areas.

3. — Electrification :

It will be possible to electrify 3-4 small centres per year per province. A choice will be made in consultation with the provincial authorities.

Total expenditure would be spaced out as follows :

1965	9,210,000 DH
1966	12,400,000 DH
1967	10,500,000 DH

4. — "Promotion Nationale" :

This will be as active here as elsewhere. The additional programme is as follows :

(in thousands of DH)

	1965		1966		1967		TOTAL	
	Working days	Amount	w. d.	amt.	w. d.	amt.	w. d.	amt.
Housing Dept.	500	1.500	500	1.500	500	1.500	1.500	4.500
(communes and municipalities)	500	1.500	500	1.500	500	1.500	1.500	4.500
Totals	1.000	3.000	1.000	3.000	1.000	3.000	3.000	9.000

RECAPITULATION - SOCIAL WORK

(in thousands of DH)

	1965	1966	1967	Total
1) Health Dept. ..	25.045	13.146	9.807	47.998
2) Rural and town planning				
- Housing	20.000	15.000	15.000	50.000
- Promotion Nationale .	1.500	1.500	1.500	4.500
- Rural improvement	9.212	12.400	10.500	32.112
- Promotion Nationale	1.500	1.500	1.500	4.500
Total 2	32.212	30.400	28.500	91.112
Grand total	57.257	43.546	38.307	139.110

CHAPTERS VIII and IX

Administrative equipment and exceptional expenditure

I. – Administrative equipment

A) The present situation :

On the basis of the necessity for a preliminary review of available buildings, the Five Year Plan only considered strictly limited objectives under the heading of equipment of administrative and military services.

The lack of adequate information even led us to admit that it was impossible to define exactly the necessary volume of expenditure during the five-year period and that the original forecasts would have to be corrected annually, since it was obviously impossible to overcome under-equipment in the countryside and backward zones such as the North.

On this basis the five-year forecast was as follows :

TYPE OF EXPENDITURE	Amount in thousands of DH 1960-64
I. — *Civilian expenditure*	
Justice	13.240
Foreign Affairs	5.000
Interior	11.860
Finance	4.630
Commerce, Industry and Mines	190
Public Works	100
Agriculture	850
Education	650
Public Health	1.500
Reconstruction at Agadir	14.980
Total	53.000
II. — *Miliray expenditure*	
Royal Armed Forces	64.000
Gendarmerie	3.000
	67.000
Total administrative equipment	120.000

In connection with this overall forecast credits opened during the Five-Year Plan were as follows :

(in thousands of DH)

	1960	1961	1962	1963	1964	Total 1960-1964
Civilian expenditure	9.033	18.252	11.685	32.981	33.790	105.742
Military expenditure	9.240	9.567	9.596	10.240	37.062	75.705
Total	18.273	27.819	21.281	43.221	70.852	181.447

Compared with the forecast for the Five Year Plan thes overall figures show an excess of more than 50 %.

It is true that an immediate explanation is to be found in the increase in prices, since the Plan was based on 1959 prices.

But the true reason for this considerable increase can be seen from a correct appreciation of the requirements of new services such as, for example, this Ministry of Foreign Affairs (15,518,000 DH granted as against 500,000 DH provided for) and the Royal Armed Forces (75,500,000 as against 67,000,000 DH).

Clearly it was very difficult to appreciate real requirements back in 1959.

B) Orientation of the Three Year Plan

Financial restrictions do not unfortunately allow us to consider many projects which would be desirable and which departments have legitimately proposed.

It is therefore obvious that for certain sectors the present delay will also be present at the end of the Plan. But we must concentrate on investments which are directly productive and likely to help the nation.

The programme accepted is therefore a minimum which does not claim to satisfy real demand.

Details are given in the following table :

TYPE OF EXPENDITURE	1965	1966	1967	Total
I. — *CIVILIAN EXPENDITURE*				
The Court and services attached ..	13.150	7.000	7.000	27.150
Ministry of Justice	2.424	5.348	5.666	13.438
Ministry of Foreign Affairs	1.700	2.400	2.500	6.600
Interior (including Armed Forces and Sûreté)	5.000	8.800	5.810	19.610
Economy and Finance	2.769	1.440	1.480	5.689
Labour	102	102	102	306
Islamic affairs	1.500	2.000	1.000	4.500
PTT	2.000	1.000	1.000	4.000
	28.645	28.090	24.558	81.293
II. — *MILITARY EXPENDITURE*				
F.A.R.	9.470	6.080	15.425	30.975
Gendarmerie	4.730	3.950	3.150	11.830
Total military	14.200	10.030	18.575	42.805
Total	42.845	38.120	43.133	124.098

II. – Exceptional expenditure (Agadir)

A) The present situation

The Agadir earthquake was a heavy burden on the nation, since it hampered investment in productive schemes.

Apart from compensation to victims, loans granted, loss of production through loss of a town and port rapidly expanding, the State, since 1960, spent more than 180 million DH on reconstruction.

1960 and 1961 were years of clearance, temporary measures and surveys. In 1962 new town planning was started and the necessary infrastructure was undertaken.

During 1963 substructure work went on, also building, since 61 buildings had already gone up and 492 were in process of construction.

In 1964 :

— all surveys were completed. The road system will be completed up to 90 % at the end of the year. The only noticeable delay is in the matter of green spaces to be provided and sports equipment, owing to difficulties which arose during survey ;

— 5 buildings with a total of 114 flats are in service ;

— 32 villas have been completed ;

— 53 villas have already been taken in hand ;

— three dispensaries and a health centres have been completed ;

— four school groups (51 classes), the Sadad Court, the market, the Public Works building, the Mines building etc. are all in process of completion. Work on the Town Hall and the wholesale market has begun.

Moreover it was in 1964 that private building really got under way the sum involved being more than thirty million DH.

Some people who feel that progress has been too slow must be completely ignorant of the problems.

E) Agadir and the Plan

It may seem superfluous to plan the work remaining to be done at Agadir, but the size of the disaster with all its human repercussions imposes on us an extra financial effort to complete the work directly in the hands of the State and to give private contractors the assistance for which the law provides.

For the next three years this effort may be estimated at 40 million dirhams distributed as follows :

1965	22	million
1966	8	»
1967	10	»

* * *

THREE YEAR PLAN 1965 - 1967

CONTENTS

INTRODUCTION 1

SECTION I.

Agriculture 66

SECTION II.

Tourism 122

SECTION III.

Training and education programme 148

SECTIONS IV and V.

Substructure 251

SECTION VI.

Mines - Industry - Handicrafts - Merchant Navy and Fisheries 294

SECTION VII.

Primary Education - Youth and Sports - Social Work 515

SECTIONS VIII and IX.

Administrative equipement and exceptional expenditure 555